

F.U.T.U.R.I.S.

Fostering Unity Through Urban Rehabilitation and Identity in Shusha

Student :Gunay Babayeva(968130)
Supervisor:Chiara Lecce



Interior and Spatial design 2022-2023
School of Design

Master's degree thesis

F.U.T.U.R.I.S.

Fostering Unity Through Urban Rehabilitation
and Identity in Shusha

Student: Gunay Babayeva(968130)

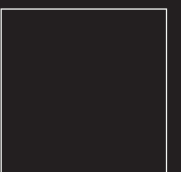
Supervisor: Chiara Lecce

Interior and Spatial design 2022-2023

School of Design



POLITECNICO
MILANO 1863



Dedication

This thesis is a tribute to the “Shusha Year” and the soldiers who gave their lives during Karabakh war. Their commitment and sacrifice serve as the work’s unspoken backdrop. Thanks to them, it is now possible to conduct this research and create this thesis. Let’s remember the lessons they have taught us about resiliency and courage as we pursue knowledge. This thesis is respectfully dedicated to them.

Acknowledgments

I want to express my sincere gratitude to my supervisor, Professor Chiara Lecce. I appreciate your suggestions, reading, and editing of my work, which was instrumental in shaping my research. Your advice and ideas helped me stay focused and directed my study in the proper direction.

I had an opportunity to collaborate with various historians and architects who significantly impacted Shusha city. They have my sincere gratitude, especially architect Gumru Mirzalieva, for her assistance, support, and provision of non-digitized data and archive materials that were helpful to my research efforts.

I want to thank everyone who participated in the interviews and contributed to the study. I want to particularly thank Shabnam Nuriyeva for her considerable contributions, which significantly improved interview insights. This work has been greatly enhanced by the time and knowledge provided by her support.

I would also like to thank all my close friends who have been my constant supporters. Your encouragement and companionship have been sources of joy and strength throughout this journey.

Finally, I would like to express my most heartfelt thanks to my family, especially my mother, to whom I will always be grateful for her unending and unwavering support and love. She contributed just as much as I did to this thesis. Every late night and every moment of uncertainty, she has been there to provide a comforting word or a desperately needed moment of clarity.

This thesis would not be possible without all of you who have participated in this journey. Thank you.



“When German soldiers used to come to my studio and look at my pictures of Guernica, they’d ask ‘Did you do this?’. And I’d say, ‘No, you did.’” - Pablo Picasso

Abstract

This thesis explores how adaptive reuse techniques might be used to restore and revitalize historic buildings in post-war cities, particularly in Shusha city after Karabakh war. Even while historical structures are the physical representation of cultural legacy, a nation's identity, and collective memory, military conflicts, natural disasters, air pollution, and many other events cause damage or demolition of some historical buildings. Understanding the necessity of maintaining these tangible links of our past, this study utilizes the concept of adaptive reuse to preserve and revitalize these historic structures. It strives to harmonize the architectural and cultural history of historic buildings with current community demands by accommodating them with modern functions. Moreover, this thesis emphasizes the significance of adaptive reuse as a socio-cultural tool that can revitalize a city's physical and social fabric in the wake of the conflict rather than just as an archi-

tectural intervention. It also explores the potential for active local participation in decision-making, hypothesizing their role as a catalyst for effective urban regeneration. The thesis is grounded in two questions: How can the implementation of the adaptive reuse strategy contribute to the revitalization of the city after the war? Can communities be regenerated with the help of adaptive reuse? To answer these questions, these ideas were practically implemented on the Two-storey Caravanserai of Mir Sayyaf Oglu in Shusha, a historic structure that was abandoned when the city was taken over. This historic caravanserai, which was partially damaged after the war, is envisioned as a mixed-use adaptation and rehabilitation in the proposed design. Mix-use adaptive reuse design will aim to foster to re-build a new localized community in the current ghost town while focusing on the current and future necessities of the city.

Content

Acknowledgment

Abstract

Introduction

- I. Purpose of the study
- II. Methodology

Community, identity and spaces

- 1.1 Sense of community
- 1.2 Heritage as a trigger inclusion of local communities
- 1.3 Transformation and redefinition of architectural heritage

Site and user analysis

- 5.1 Caravanserais in Shusha
- 5.2 2-storey Caravanserai in Shusha
- 5.3 User requirements and expectations

Rebuilt from ashes

- 2.1 Urbicide. War damage to historical buildings and its influence on the community's identity
- 2.2 Post-war reconstruction. Urban regeneration vs saving urban identity
- 2.3 Cultural heritage in post-war recovery.

Site & user analysis

- 6.1 Insights
- 6.2 Concept
- 6.3 Design drivers

Metamorphosis of space

- 3.1 Reuse to Reinhabit
- 3.2 Influence of adaptive reuse on community and its regeneration
- 3.3 Adaptive reuse in contemporary world.
- 3.4 Case studies of adaptation

Development process and design

- 7.1 User experience
- 7.2 Services
- 7.3 Spatial development
- 7.4 Settings

Contextual and regional description

- 4.1 Karabakh area
- 4.2 Cultural identity of Shusha and its community
- 4.3 Post-war recovery. Shusha rehabilitation plan

Design implementation

- 8.1 General technical details
- 8.2 Structural elements and coverings
- 8.3 Furniture details
- 8.4 Areas

Bibliography

Introduction

Azerbaijan has originally paid great attention to the preservation of its heritage of all kinds. The history of protection of Azerbaijan's cultural heritage began with the collapse of the Soviet Union and with the adaptation of the Resolution of Azerbaijan Revolutionary Committee, dated 1921¹. Since then, Azerbaijan has prioritized the preservation of its cultural identity and has registered numerous tangible and intangible cultural heritage in UNESCO¹. There are many factors that shaped the culture of Azerbaijan. Being a linking point between East and West, Azerbaijan was a land where various ethnical groups resettled and lived together. In addition, its relief and geographical position, climatic conditions, rich deposits of minerals, and abundance of raw materials had a significant impact on the development of Azerbaijan's culture, particularly its craft. Each city and region of the country is distinguished by the development of certain types of crafts and arts. One of them was the Karabakh region, with its center Shusha city, which was particularly known for its intellectuals and artisans. House museums of Shusha musicians, poets, artists, and nobles have central importance among the historical buildings of Azerbaijan. In addition, carpentry, weaving, and jewelry-making were also highly developed due to the abundance of raw materials and minerals². Due to its location on Silk Way, many foreign merchants were traveling to Shusha for its crafts, and

starting from the second half of the 18th century, Shusha reached the scale of world markets with its carpets, silks, fabrics, and porcelain dishes. During this period, the wealthy people of Shusha built caravansary in places called Ashagi Bazaar and Meydan. However, at the beginning of the 20th century, since the caravan trade lost its importance¹, the caravanserais became historical monuments of Shusha. In 1992, as a result of the occupation of Shusha, many historical buildings were damaged or destroyed, and the community was scattered across all regions of the republic. This caused the destruction of all branches of crafts in the city. Even though Shusha city was liberated after 28 years of occupation, after the Second Karabakh War in 2020, the city was strongly damaged during the period and became a ghost town that lost its identity. Most of the buildings, including historical buildings of the city, were expired or were in a state of disrepair. There were no appropriate conditions that would enable Shusha refugees to come back to their hometowns. To revitalize the city, since the liberation of Shusha, the government of Azerbaijan has already started intensive restoration, reconstruction, and construction work in the city. Speaking to the newly-appointed culture minister, Anar Karimov, the president said that the protection of

1. Ministry of Culture of the Republic of Azerbaijan. Azerbaijani National Commission for UNESCO. 2006. Available at: <chrome-exten-si-on://efaidnbmnnnibpcajpcglclefindmkaj/https://whc.unesco.org/uploads/nominations/1076rev.pdf>

2. Administrative Department of the President of the Republic of Azerbaijan. Handicraft. 2012. Available at: <chrome-exten-sion://efaidnbmnnnibpcajpcglclefindmkaj/https://files.preslib.az/projects/shusha/en/b4.pdf>

Azerbaijan’s cultural and religious sites would be the ministry’s top priority. The goal is to restore the historical appearance of Shusha and turn this city into an open-air museum. The study question is if it will be enough to regenerate the community, to balance the old community with a new generation.

This thesis evaluates the adaptive reuse strategy utilization in heritage buildings in post-war cities and how it could contribute to community regeneration. As it was detected, there are almost no plans and policies for implementing adaptive reuse in Azerbaijan. So, this thesis aims to propose a model to evaluate the adaptive reuse of historical buildings in post-war cities that will contribute to improving preservation methods. So, as the basis, the Two-storey caravanserai in Shusha city was utilized to evaluate alternative scenarios for reusing the post-war historical building.

Introduction to adaptive reuse

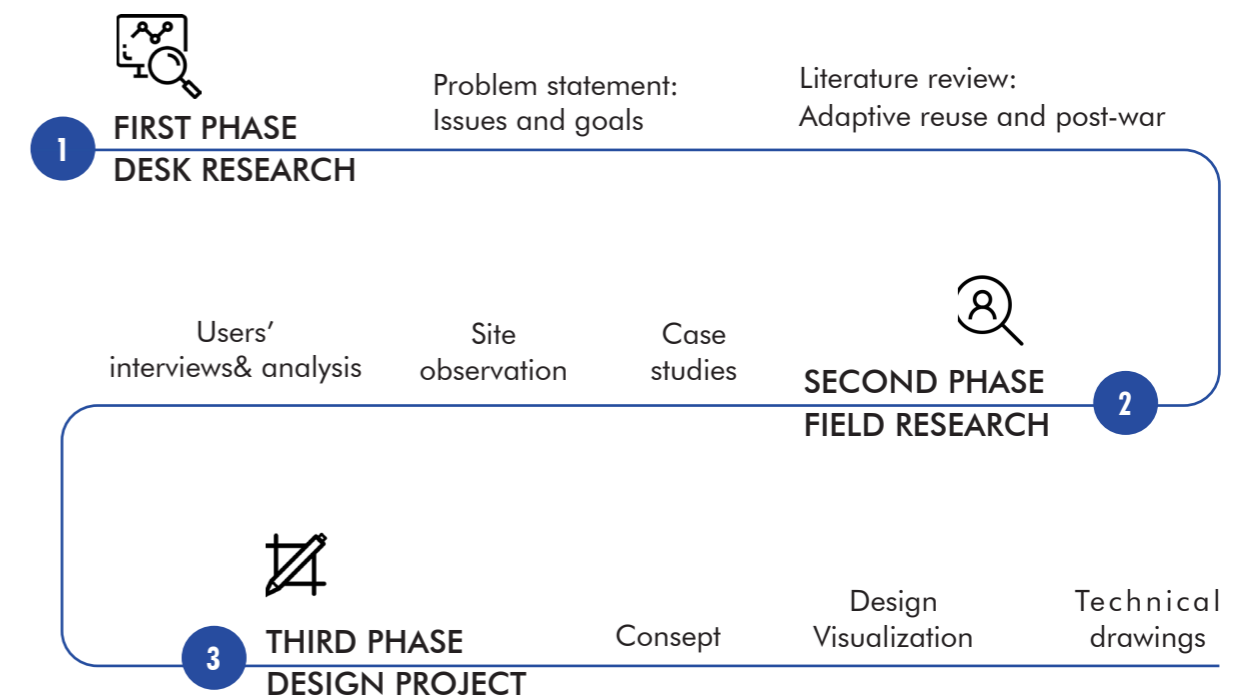
The adaptive reuse strategy has been utilized throughout this thesis as an “adaptation of the building with new use while preserving its historical value.” Re-purposing functions of existing buildings is not a new phenomenon since old times. Buildings with secure construction were adapted to respond to changing world needs or functions. However, these interventions mainly were realized without considering preserving the identity of heritage buildings. In the contemporary world, adaptive reuse has become an increasing trend, and during the last decade, more historical buildings have been

adaptively re-used, conserving and enhancing their historical and cultural value. Adaptive reuse strategy provides society many social and environmental benefits by revitalizing familiar buildings. However, to obtain a successful adaptive reuse project, all factors should be studied and considered while deciding on the new use of heritage buildings.

Objectives

This thesis aims to rehabilitate heritage buildings in the post-war city Shusha by implementing the adaptive reuse strategy. The purpose of exploring an adaptive reuse strategy for the rehabilitation of heritage buildings is, on one side, to preserve the architectural and cultural significance of historical buildings and, on another side, to increase the contemporary use efficiency by adding modern functions to the interior. Thus adapting it to the need of contemporary community and fostering a community re-building process. After the war, not only the historical buildings were ruined, but also the city community was damaged. In addition, it will study if the participation of locals is essential in decision-making and if they can make a positive contribution revitalization process.

Methodology



The methodological approach was divided into three phases: desk research, field research, and design project. The initial phase focused on the data collection throughout the literature survey to analyze the relationship between space and community and post-war rehabilitation approaches and identify the factors influencing the adaptive reuse decision-making process. Secondly, field research has been conducted. In this phase, successful examples of adaptive reuse have been analyzed, and interviews with the Shusha city community supported observations of the site. Lastly, the design model has been developed according to the defined insights and factors.



Community, identity and spaces

1.1 Sense of Community

1.1.1 Beyond culture. Identity of cultural places

1.1.2 Placemaking. Creating sense of community through public places

1.2 Heritage as a trigger inclusion of local communities

1.3 Transformation and redefinition of architectural heritage



1.1 Sense of community

People belong to various social groups, which form an integral part of their identities³. The idea of community stands out among the various sorts of social organizations, such as “family,” “neighborhood,” or just a collection of individuals. Unlike selected ties, community affiliations are acquired and known. A community is a social unit where individuals are bound by shared lives, common interests, objectives, cultures, worldviews, needs, goals, and collaborative action. In essence, rather than being influenced by genetic transmission, a society behaves as a cultural organism, with learned behaviors, beliefs, and narratives⁴. These

beliefs or narratives become so significant to them that it shapes a part of who they are, a sense of community. The concept of a sense of community is broad and complicated, integrating collective identity, collective action, and collective memory.

Collective Identity and action

One significant element of the sense of community is collective identity and collective action. People are willing to prioritize some form of the common good over individual rights and a personalized view of and approach to the good life because of their ties to their communities.

3. Silk, J. The dynamics of community, place and identity.1999. p. 6. Online article available at:journals.sagepub.com/doi/10.1068/a310005

4. Bartle, P. What is community? A sociological perspective.2010. Online article available at: edadm821.files.wordpress.com/2010/11/what-is-community.pdf



“The Gates”. Installation by Christo and Jeanne-Claude, 2005. † invited people to walk through the park as a collective experience, creating a sense of unity and community. Source: bloomberg.com

“It is in society that people normally acquire their memories”⁴

Duty, responsibility, and loyalty are arranged in a sociospatial hierarchy. This community’s instrumental approach is frequently disregarded in favor of cultural norms, values, and other intangible factors influencing communal identity⁵. Territorial or place-based relationships are frequently the basis of community ties. People are more likely to form a sense of community when they share a constrained space and interact face-to-face without intermediaries. Essentially, this is another way of emphasizing that people are cultural producers. People who live together for an extended length of time will create standards for their beliefs and behaviors and enforce those norms with a sort of morality live together for an extended length of time will develop models for their be-

liefs and behaviors, and they will also implement those norms with a kind of morality that was established by consensus.

Collective memory

Another critical aspect of the sense of community is collective memory, which is a relatively new concept. One of the well-known researchers who examined the idea of collective memory, connecting it to time and location, is the sociologist Maurice Halbwachs, who connected collective memory to two main factors: time and space. “It is in society that people normally acquire their memories. It is also in society that they recall, recognize, and localize their memories”⁶.

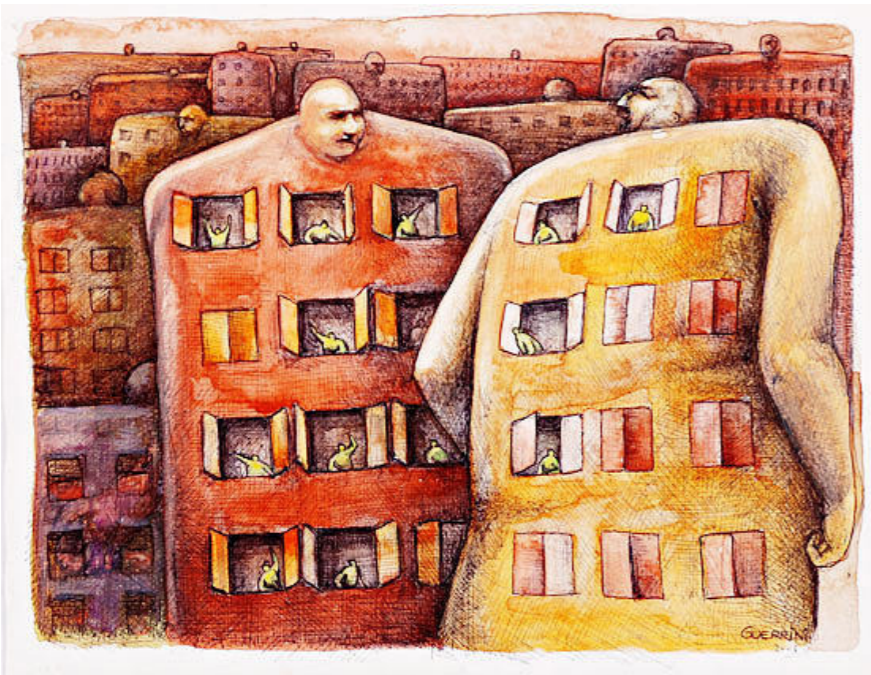


Figura 1: “Cities” painting by Sebastian Guernini.

5. Silk, J. The dynamic of community, place and identity. 1999. p. 5-17. Online article available at: journals.sagepub.com/doi/10.1068/a310005

6. Halbwachs, M. On Collective Memory. 1992. Jeffrey, K.O., Robbins, J. Social Memory Studies: From “Collective Memory” to the Historical Sociology of Mnemonic Practices. 1999. Available at: [jstor.org/stable/223476?seq=33](https://www.jstor.org/stable/223476?seq=33)

He also made a point of the fact that most people learn and recollect their memories in society⁶. In contrast to individual memory, collective memory refers to memories shared by people who share a common culture, belief system, or community. According to Zerubavel, collective memories might be memories of the group’s experiences throughout history rather than necessarily representing an individual’s experience⁷. As a result, a community member may not share the same experience for it to become a part of their shared memory; memories can be passed on from one person to the next and from one generation to the next. Because it is selective and leaves out some important events and turning points in a group’s history, collective memory differs from history. Society creates and grows its memory following its requirements, ideologies, and inclinations, excluding anything that can cause discord among its members. In other words, memory is selective rather than objective and abstract, and it adjusts itself to promote identity development and a sense of community⁸.

Collective identity, collective action, and collective memory are the primary elements of the sense of community that demonstrate how communities form and maintain their cohesive nature. However, it is crucial to understand that the sense of community is not static. It evolves and changes through time because of social, economic, and political influences. For instance, communities may change over time because of demographic shifts, urbanization, technological development, and globalization. Additionally, there are differences in levels of community connectedness between age groups, with older adults frequently demonstrating higher levels of a sense of community than young and middle-aged adults⁹. As people get older, this trend is reinforced, especially for people with restricted mobility who spend a lot of time in their communities. These elements work together to create a dynamic feeling of community, stressing its significance as a catalyst for social cohesion and group action.

and localize their memories”⁴

7. Zarubavel, E. Recovering Roots: Collective Memory and the Making of Israeli National Tradition. 1995.

8. Eyerman, R. The past in the present culture and transmission of the memory. 2004.

9. Tingting, H., Houchao, L., Xueying, C., Jia, R. The relationship between sense of community and general well-being of Chinese older adults: A moderated mediation model. 2023. Online article available at: [frontiersin.org/articles/10.3389/fpsyg.2022.1082399/full](https://www.frontiersin.org/articles/10.3389/fpsyg.2022.1082399/full)

1.1.1 Beyond culture. Identity of cultural places.

The role of a place extends beyond assisting a person with daily requirements. An emotional and sentimental bond develops from the very first connection between a person and a place. As the time of connection increases, satisfaction and security with the location strengthen. After that, the place's symbolic meaning of "belonging" is formed, which helps to make it a part of one's identity. "Feeling like you belong somewhere is one way that identity is tied to a specific place. It's a location where you feel at ease or home since particular characteristics of that location symbolize aspects of whom you are¹⁰". In other words, place identity is more than physical features and built environment. It includes all the social, cultural, and historical elements that contribute to a place's unique identity. A place's identity is significantly influenced by its memory. Place memory is emerged through time and fosters a stronger, more long-lasting sense of community among residents of a particular area. The place acts as a catalyst and a symbol of the values, opinions, and actions that a community of social actors associates with it¹¹.

Sack's genealogy of place, which charts how pre-modern and modern civilizations have changed over time, serves as an example of how the interaction between people and places has changed¹². However, it was only in the

1970s that place's impact on defining one's identity was systematically studied by Anglo-American geography. This study predominantly embraced a phenomenological method that emphasizes each person's unique perception of place and commitment to the areas where they reside¹³. Tuan and Relph's foundational works in humanistic geography presented the experiential perspective of place and the "insideness" or "outsideness" of a person in connection to a place¹³.

Cultural places and identity

The intersection of culture and place is the phenomenon that demonstrates how culture and place are interwoven and interact with one another. Place and culture shape and are shaped by one another. Altman said, "People construct their environment and, in turn, their environment constructs them."¹⁴

For instance, cultural sites frequently reflect the cultural norms and values of the community that developed them, which in turn helps to define the community's cultural identity. One such example is Écomusée du Pays de Rennes. The community created the ecomuseum to preserve the architecture of the Bintinais farm, a leading local reference of the community of Rennes from the 15th to the 20th century. Another objective was to preserve the rural memory related to the life of the community's past. The center of its concept is a community to reconnect the community and living traditions. Cultural places play an essential role in building a sense of place-based identity. Contrary to the heritage values of cultural sites, which are closely linked to the goals and objectives of stakeholders, commu-

nity values and sentimental values are connected to nostalgia, feelings, or memories¹⁵. Cultural heritage is a depiction of the intangible aspects of civilizations on the one hand. It comprises the aspects of cultural history that are passed down from one generation to the next. The spiritual and intangible heritage of a culture, as well as its traditions, values, and conventions, are all represented by cultural heritage. While on the other hand, physical components of cultural heritage, such as urban design, architecture, and landscape, also play a significant role in shaping their identities. The architectural environment of cultural places reflects the historical, social, and cultural context in which they were established, and it affects how people view and engage with these places.



Figura 2: Écomusée du Pays de Rennes

14. Altman, I. and Serha M. Place Attachment. 1992.

15. Scott, R. Sanders, Benjamin, G. Communities of Place? New Evidence for the Role of Distance and Population Size in Community Attachment. 2016.

10. Rose, G. Place and Identity: a sense of place. A place in the world. 1995. p. 87-110.

11. Manzo, Lynne C. Beyond house and haven: Toward a revisioning of emotional relationships with places. 2003. p. 47-61. Journal available at: [sciencedirect.com/science/article/pii/S0272494402000749](https://www.sciencedirect.com/science/article/pii/S0272494402000749)

12. Antonish, M. Identity and place. 2018. Online article available at: [aca demia.edu/8144547/Identity_and_Place_a_bibliography](https://www.academia.edu/8144547/Identity_and_Place_a_bibliography)

13. Tuan, Yi-Fu. Space and Place: The Perspective of Experience. 1977.



Figura 3: Il Palio di Siena

The annual Il Palio di Siena festival, which has mediaeval roots, is held in the Piazza del Campo in Siena, where 17 contrade or in other words neighborhoods/communities of the city compete in horse race.

Cultural identity is also influenced by social events that take place in these places. Festivals, ceremonies, and other cultural practices unite people and strengthen their sense of community. These events often incorporate elements of the physical environment and the cultural history of the place, further reinforcing the connection between people, culture, and place. Eventually, outside forces like politics, economics, and globalization also impact the identity of cultural places. Political decisions, such as zoning laws and urban planning principles, can significantly influence cultural locations' physical and social character. Economic forces like development and tourism can also affect the

identity of cultural places by transforming their social and physical landscape. Globalization has also contributed to shaping cultural locations' identities, due to its increased connectivity and diversity. Despite these influences, cultural place identification continues to be an essential part of human existence. People express their cultural identity through cultural places, and it is also through these locations that cultural legacy is conserved and passed on to upcoming generations.

1.1.2 Placemaking. Creating sense of community through public places.

Imagine a lively town square with people of different ages and backgrounds having exciting conversations, taking in performances, and soaking up the energetic atmosphere. Placemaking, a creative process that transforms common areas into flourishing community centers, is what gave rise to this dynamic public space. Placemaking is not only about planning and building physical structures but also about creating spaces where people feel a strong connection and sense of belonging.

The notion of a place is closely related to the idea of home, and for most people, the sense of belonging depends on the closeness to home¹⁶. Therefore, the neighborhood's viability and well-being depend on the availability of public space and the diversity of the connecting

elements—streets, squares, sidewalks, seating areas, parks, gardens, areas for children and animals, bike lanes, pedestrian-only streets, and proximity areas. The essential nature of the city lies in what occurs between houses. The quality of these spaces and their vicinity eventually affects the health and well-being of the community.

The essential nature of the city lies in what occurs between houses.

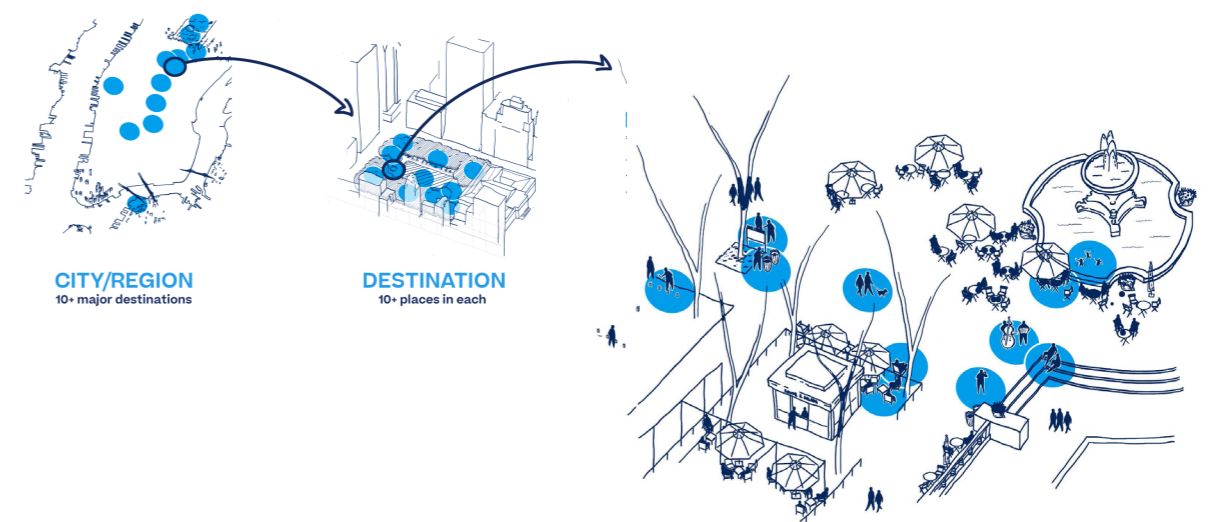


Figura 4: The power of 10+ by PPS. How cities transform through placemaking

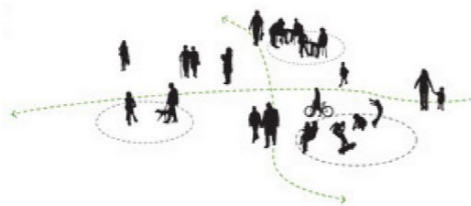
16. National academy press. Community and quality of life. 2011. Available at: nationalacademies.org/10262

Jacobs emphasized the value of developing spaces

Jane Jacobs was one of the earliest urban activists who made contributions to placemaking. She criticized the tight separation of urban services in planning theories and the concentration on car-centric traffic. She pushed for an alternate strategy that acknowledged the variety of ways individuals occupy and use urban environments¹⁷. Instead of conforming to strict planning theories that prioritized car-centric traffic and the division of urban activities, Jacobs emphasized the value of developing spaces that suited the desires and preferences of the community members. Even though traditional planners frequently disregarded them, her findings challenged the dominant planning discourse. Jan Gehl expanded upon Jacobs' concepts in his book "Cities for People," which further reshaped the established hierarchy of placemaking. He emphasized three key principles for urban planners: starting with the lives of people, paying attention to public and shared places, and putting buildings as the final focus¹⁷. Gehl recognized the value of community involvement and the development of active public places in fostering a sense of belonging and identity.

This paradigm shift, motivated by the ideas of placemaking and the voices of influential urbanists and writers who have pushed for public involvement in the design process, fosters a reinvention of community planning and development practices. Cities like Amsterdam, for instance, saw the incredible work of architect Aldo Van Eyck following World War II, who converted abandoned and environmentally damaged regions into over 700 children's play places¹⁷. These

LIFE



SPACE



BUILDINGS



Figura 5: Illustration of Gehl methodology: life, space, buildings

ingenious little play areas were typically the result of collaborations between architects, designers, landscape architects, and members of the neighborhood community. They exemplified the effectiveness of grassroots movements and the possibilities for repurposing abandoned places as beneficial assets for the neighborhood. The work of Van Eyck was part of a larger movement that supported locals' unplanned acts of kindness toward vacant buildings.



Figura 6: Aldo van Eyck's playground at the Buskenblaserstraat in Amsterdam. (Courtesy of the Amsterdam City Archive)



Figura 7: Aldo van Eyck's playground at the Laagte Kadijk in Amsterdam. (Courtesy of the Amsterdam City Archive).



Figura 8: Aldo van Eyck's playground at the Van Boetzelaerstraat in Amsterdam. (Courtesy of the Amsterdam City Archive).

17. Elena, G. Placemaker. Gli inventori dei luoghi che abitiamo. 2021.



Figura 9: The High Line in New York by architect Elisabeth Diller.

The emphasis has switched in the past few decades from building and accumulation to recovering and reusing existing structures, integrating nature into architecture, repurposing inherited artifacts, and experimenting with new ways of living. Placemaking includes more than just building parks; it includes urban squares, public spaces, places for culture and recreation, temporary exhibition pavilions, amphitheaters, and music halls. The High Line in New York City, created by famous architect Elisabeth Diller, is an excellent example of the transformative power of placemaking. The High Line is a dynamic linear park that offers a distinctive fusion of nature, art, and urban design. It was started by the vision of two activists who wanted to redefine the idea of a park. The

project successfully reduced public space and restored it, paving the way for modern urban initiatives around the world¹⁷. Millions of people visit it annually, making it a source of pride for the neighborhood and an engine for growth. This creative idea exemplifies how revitalizing a public area can give a neighborhood new life and build a strong feeling of place and community. As a result of these experiences, it is evident that urban development should include more than just geographical considerations. While detailed designs of buildings, squares, urban greenery, and services are frequently prioritized in traditional planning, the essence of cities lies more in their temporal dimension.

17. Elena, G. Placemaker. Gli inventori dei luoghi che abitiamo. 2021.
18. Peter, J. Jane Ellery. Strengthening Community Sense of Place through Placemaking. 2019. Online article available at: ideas.repec.org/a/cog/urbpla/v4y2019i2p237-248.html

Placemaking is a collaborative idea that demands the involvement of inhabitants, architects, designers, and legislators. Through placemaking, neglected areas can be reused into significant assets for the community. Community members play a more active political voice and a decisive role in influencing their surroundings when they actively participate in the design and development of public places¹⁸. This engaged participation strengthens the ability of the community and develops local leadership. Its participatory strategies follow the coproduction principles, which call for professionals to work with communities and communities to work with professionals to jointly develop commodities, services, and policies that respond to community needs¹⁹. The coproduction tenets acknowledge that citizens can actively participate in creating public goods and services that matter to them. Community members take on an active political voice and a powerful role in reviving their environment by participating in the deliberative and communal processes associated with planning and creating public places²⁰. Another essential component of placemaking is the transformation that takes place when community members actively participate in the process. This interaction creates a positive cycle and mutual stewardship between the community and its environment. The place impacts and alters the community as the community reshapes and changes the place. Placemaking has gained popularity recently and is now understood to be a potent tool for building thriving communities. It strives to foster community health and safety, civic pride, neighborhood ties, social fairness, economic growth, and environmental sustainability²⁰. The idea of "multi-solving," which entails pooling knowledge, funds, and political will to address several problems with a single investment of time and resources, is consistent with the concepts and practices of placemaking²¹. Addressing global concerns and advancing the UN's Sustainable Development Goals requires placemaking, citizen science, and community development²².

19. Goerner, S.G. Today's Copernican flip: How putting collaborative learning at the hub of human evolution our chances of survival. 2007. p. 481-491.
20. Silberger, S., Lorah, K., Disbrow, R., & Muessig, A. Places in the making: How place-making builds places and communities. 2013. Online article available at: dusp.mit.edu/cdd/project/placemaking
21. Swain, E. The magic of "multi solving". 2018. Available at: ssir.org/articles/entry/the_magic_of_multisolving#
22. United Nations. 17 goals to transform our world. 2016. United Nations. Available at: un.org/sustainabledevelopment

1.2 Heritage as a trigger inclusion of local communities

The promotion of inclusion and involvement within local communities can be powerfully aided by heritage. Heritage can help to promote a sense of belonging, identity, and pride among locals by maintaining and honoring a community's tangible and intangible cultural assets. It can also serve as a foundation for shared memories and group action. Heritage "is not merely a set of objects but is more about the collaboration between public and their world and interaction between communities and people," claim Auclair and Fairclough²³. The value of legacy preservation has gained attention in recent years on a global scale, with an increasing focus on its capacity to promote cultural variety, social cohesion, and economic growth. The Faro Convention of 2005 emphasizes the significance of a deeper comprehension of heritage and its connections to communities and society at the EU level²⁴.

It is crucial to recognize that social identity and cultural heritage are intricately intertwined, making heritage an influential factor in shaping community identity and the physical spaces they inhabit. Elements such as geography, history, culture, language, and social conventions all play a role in shaping community identity, which is a dynamic process susceptible to external forces like migration, globalization, and urbanization. In this context, heritage acts as a stabilizing force, providing a sense of continuity and grounding local communities to their past, even in the face



Figura 10: The vibrant art district in San Miquel

The neighbourhood is filled with vibrant murals, sculptures, and interactive exhibits that were all made by local artists in collaboration with community.

of rapid change and transformation. Heritage preservation can also be used as a tool for community empowerment, as it enables locals to take ownership of their cultural heritage and take part in decision-making processes connected to its preservation and promotion. This involvement encourages cooperation among community members to pursue individual and shared goals and improve the local community, which can strengthen a sense of community identity and belonging²⁵. By establishing links and maintaining cooperation long-last

23. Auclair, E., & Fairclough, G. Theory and practice in heritage and sustainability: Between past and future. 2015.

24. Council of Europe. The Faro Convention: the way forward with heritage. 2020. Online article available at: edoc.coe.int/en/cultural-heritage/8757-the-faro-convention-the-way-forward-with-heritage.html

ing and stronger connections can be made between community members. Such engagements have been shown to foster a sense of trust, faith, and belonging amongst community members²⁵. Additionally, there is increasing recognition of the relationship between social and human well-being and cultural heritage, emphasizing the need for increased public participation in the preservation framework to build a more diverse and empowered community. One such local engagement has been shown to preserve Hong Kong's Dragon Garden or Vietnam's ancient town Hoi An²⁵. For example, the well-preserved trading port of Hoi An Ancient Town, which is included as a UNESCO World Heritage site, exhibits a rare synthesis of local, Chinese, Japanese, and European cultural elements. A strong sense of community pride, identity, and belonging has been fostered by preserving and promoting Hoi An's legacy. The community actively contributes to promoting and preserving Hoi An's cultural assets. Locals, artisans, and experts work on various projects, including workshops for traditional handicrafts, building restoration, and cultural events, such as the Hoi An Lantern Festival and the Full Moon Festival, where locals and guests can join to honor their cultural history. These activities not only support a thriving local economy but also strengthen social cohesiveness and a sense of community.



Figura 11: Artists perform "Hoi An Craftsmanship -2023"



Figura 12: The Hoi An Lantern Festival

25. Rosilvati, Y., Rafique, Z., Habib, S., Nurmandi, A. Cultural Psychology, Social Identity, and Community Engagement in World Heritage Conservation Sites. 2020. Online article available at: redalyc.org/journal/279/27964362008/html/

The socio-cultural and psychological components of tourism may include an enhanced feeling of social identity.

The maintenance and preservation of historic infrastructure and inner-city improvements benefit residents economically and culturally. Sites and activities associated with cultural heritage can draw visitors, generating revenue and fostering employment. Consequently, tourism may improve local life and sustain it through improved local infrastructure and shared goals that can improve access to health care, funding for education, employment opportunities, and income levels. The socio-cultural and psychological components of tourism may include an enhanced feeling of social identity, cultural psychology, a stronger sense of connection to the native environment, and improved social capital, which is followed by an increase in the number of tourists. For instance, in Indonesia, tourist sites improved the locals' attitudes towards adapting to changes, which improved their understanding of other people's customs and practices and improved their quality of life overall²⁵.

In addition, in many instances, heritage can serve as a catalyst for involving local

communities in increasing understanding and appreciation of other cultures and viewpoints. It enables people to connect with their shared heritage and customs and to gain knowledge from those who may have had different experiences. Feelings of cultural pride may also be sparked by the common identity connected to one's cultural background and historical context. This pride in one's cultural heritage and identity results from education and initiatives to increase public knowledge of the existence, significance, and conservation of historical sites²⁶.

However, heritage's place in the community identity space is not without difficulties. The potential for legacy to be used as a means of exclusion rather than inclusion is one of the main problems. It is significant to remember that not all communities have equal access to cultural resources and that not all communities are equally able to shape and manage their own identities and spaces. Due to issues like a lack of money, cultural hurdles, or historical marginalization, marginalized communities frequently encounter major obstacles when accessing and participating in heritage activities. As a result, heritage programs must be created and carried out in a way that is equitable, inclusive, and that considers the various needs and viewpoints of everyone.

25. Rosilvati, Y., Rafique, Z., Habib, S., Nurmandi, A. Cultural Psychology, Social Identity, and Community Engagement in World Heritage Conservation Sites. 2020. Online article available at: redalyc.org/journal/279/27964362008/html/

26. Schuster, J. M. D. Preserving the built heritage: tools for implementation. 1997.

1.3 Transformation and redefinition of architectural heritage

Architectural structures are constantly changing and evolving. What was once regarded as revolutionary and cutting-edge becomes a reflection of the past over time. As these contemporary structures age and gain historical significance, they gradually merge with older structures to form new historical structures. Emerged concrete jungles and the pressure to accommodate the demands of a rapidly changing society raises a crucial question about which buildings should be redefined as architectural heritage and preserved and which historically and culturally significant structures should be demolished or altered. As a result, the preservation of architectural heritage becomes a continuous discussion between the present and the future, requiring careful thought and wise judgment.

Value assesment and peservation

Since the middle of the nineteenth century, when the conservation of historic structures became a conscious process, there have been ongoing discussions about the preservation and characterization of architectural heritage. The discus-

sions center on the evaluation of value, which considers the heritage's aesthetic qualities, historical relevance, and communal memory²⁷. Memory provides the present with a sense of continuity and context. While eradicating the past can be risky, it is nostalgic and should be handled cautiously. Another value is history, which aids in comprehending a structure's historical significance and its part in determining a location's story. Design is used to describe a building's aesthetic and architectural worth. For instance, in Northern Ireland, a vernacular housing intervention must consider the structure's importance as a repository of folklore and a representation of the way of life of the region's residents²⁸. On the other hand, the preservation of landmark structures like the Unite d'Habitation in Marseilles necessitates considering both its revolutionary design features and historical significance as a standard housing created by Le Corbusier. In the modern era, the advent of digital technologies and changing societal values have further influenced the transformation and redefinition of architectural heritage.



Figura 13: Vernacular housing in Northern Ireland

27. Hoteit, A. War against architecture, identity and collective memory. 2015. Online article available at: researchgate.net

28. TheIrishTimes. The way we were and how to preserve it. 2005. Online article available at: irishtimes.com

The impact of digital technologies on the heritage redefinition

Technology has changed how we experience and interpret the world around us. Information about locations quickly spreads thanks to the extensive use of social media platforms, travel blogs, and online reviews, which affects people's decisions about where to vacation.²⁹ When specific structures or landmarks are featured in visually appealing photos or movies shared online, they attract much attention. These digital representations, combined with suggestions and user-generated content, help a location become famous online and attract travelers. Online platforms like social media give people new ways to interact with architecture, share their experiences, and build online communities. A new era of architectural appreciation has begun in the digital age, where screens and virtual environments mediate aesthetics, experiences, and social interactions. The American National Park Service's (NPS) "Find Your Park" campaign is one notable instance. The NPS was aware of the potential of digital media to reach a large audience and spark interest in national parks. They made use of social media sites like Instagram, Facebook, and Twitter to share breathtaking images, videos, and user-generated material from the nation's national parks. They sought to encourage people to travel to these natural wonders and interact with the nation's rich natural heritage by creating visually appealing and exciting content. By launching this campaign, the NPS capitalized on the rise of travel ex-

periences that are mainly influenced by social media. They urged people to use the hashtag #FindYourPark to share their park experiences, enabling others to join the campaign and widen its appeal. By fostering a sense of community among park enthusiasts, this user-generated content promoted the parks even more.



Figura 14: Find your park campaign advertisement



Figura 15: Instagram tourism

29. Buhalis, D., & Jun, S. H. E-tourism. *Contemporary tourism reviews*. 2011. p. 1, 2-38.

Community engagement and digital technologies

In recent years, cultural institutions and heritage experts have embraced interactive technology design to promote community involvement and conversation around heritage. Digital technology has made it possible for communities to become more actively involved in the identification, gathering, and management of cultural assets³⁰. To improve visitor experiences, create interactive displays, and enable professionals to directly control digitally enhanced experiences, participatory design techniques, and co-design processes have been used. Utilizing tech-

nology, such as augmented reality (AR) or virtual reality (VR), for instance, can offer interactive experiences that engage and educate visitors while allowing them to virtually explore historical contexts and heritage details. People can explore fluid spaces that transcend the constraints of time and place using virtual reality (VR)³¹. With the help of virtual tours and digital reconstructions, viewers can see remote historical sites up close and personal without having to physically travel there. This technical development opens new opportunities for boosting the significance of architectural history and restoring architectural features to the public's awareness.

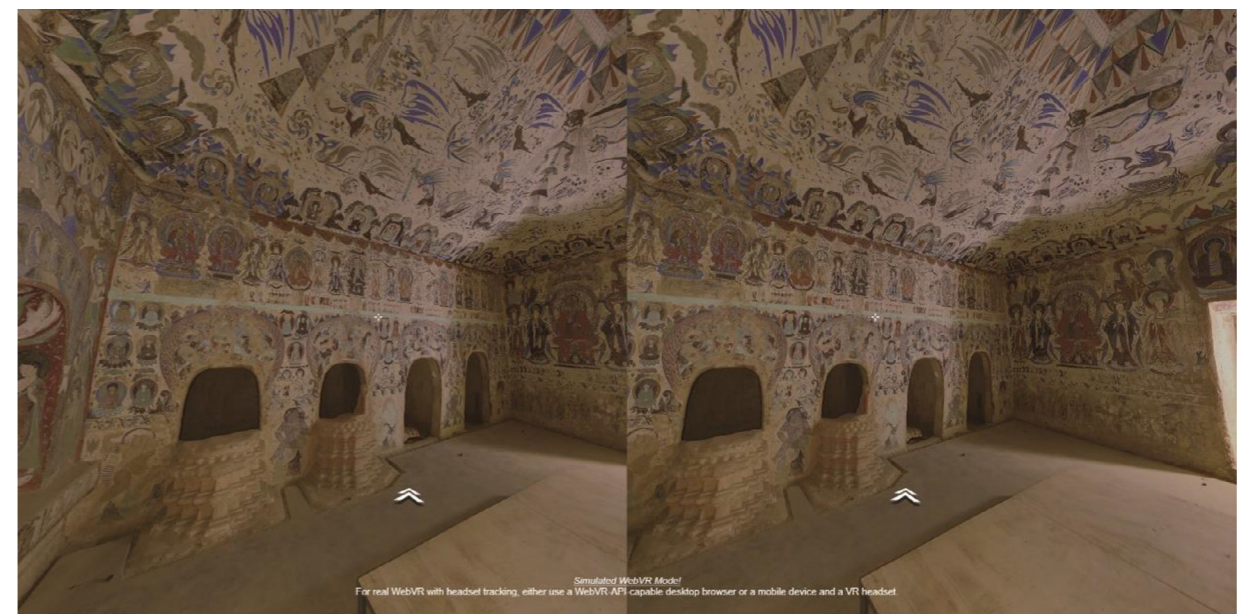


Figura 16: VR tour of Mogao Grottoes Cave 285 in VR binocular mode, Screenshot from the Digital Dunhuang website

30. Gigglitto, D. et. al. Bridging cultural heritage and communities through digital technologies: Understanding perspectives and challenges. 2021. Online article available at: [researchgate.net](https://www.researchgate.net)

31. Pei, J., Liu, Y. Fluid space: Digitisation of cultural heritage and its media dissemination. 2022. Online article available at: [sciencedirect.com/science/article/pii/S2772503022000202](https://www.sciencedirect.com/science/article/pii/S2772503022000202)



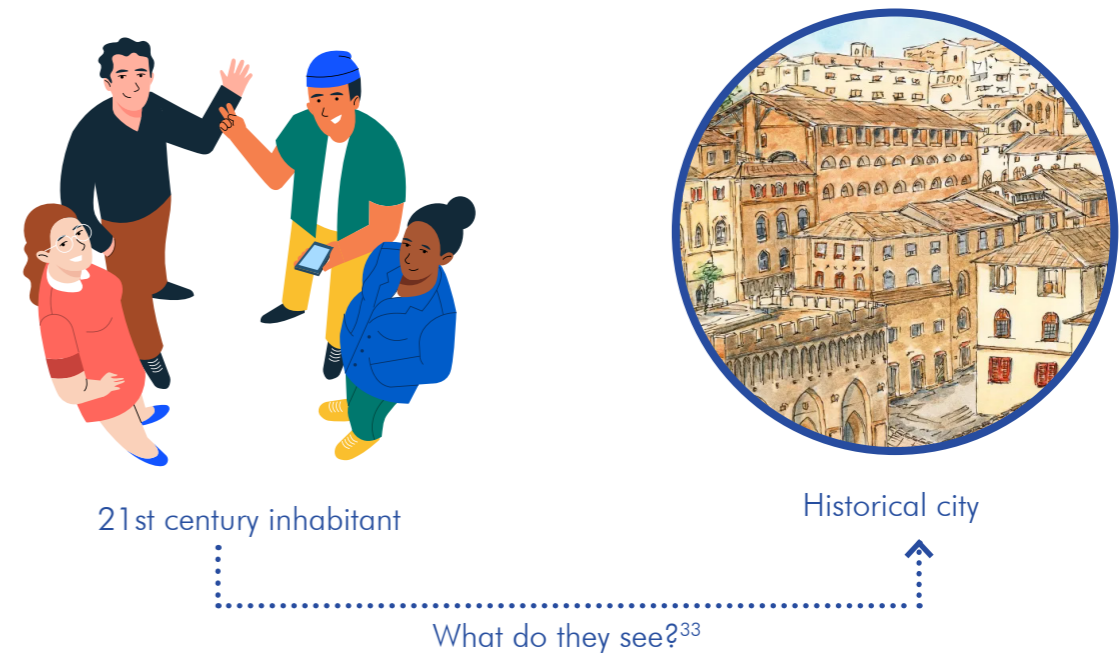
Generation Z and digital phenomena

The emergence of Generation Z in evolving communities, born into the digital age, has caused a shift in the importance placed on architectural heritage. They may not be as interested in historical details as other generations because they are the first generation to have grown up with broad access to the internet and digital technologies³². They emphasize a location's attraction on the internet and its role as a digital phenomenon. Generation Z is more likely to be interested in and visit structures that become well-known on social media, attracting attention and becoming trending locations³³. The perception and value of architectural heritage, for instance, have been significantly shaped by digital platforms like Instagram and Google Maps. As Instagram

makes places more "Instagrammable" and visible, it has assisted in the gentrification of some areas. Digital tools like Google Maps and Airbnb have made it possible for people to explore and interact with actual locations. These digital phenomena have influenced both the popularity and preservation of architectural heritage since structures that become digitally famous are more likely to be remembered and kept from being demolished. Additionally, when a structure achieves digital fame, it frequently draws more visitors, increasing tourism revenues and providing opportunities for nearby businesses. As a result, there is often more support and investment in the maintenance and restoration of these buildings. Digital fame can also generate awareness and appreciation among a global audience, fostering a sense of pride and cultural identity in the local community.

32. Pater, D. 10 Tips For Marketing To Gen Z Consumers. 2018. Online available at: forbes.com

33. Tamborrino, R. Digital Urban History, and Heritage: Creating Critical Narratives of the Historical City. In international conference Historical City. 2023.



Distanced perception of the environment.

They often notice a significant gap between what they see and their understanding of the world. This disconnect is expressed through a more abstract and analytical interpretation of the city's surroundings. The perceived gap between observer and observed is influenced by the individual's involvement in various aspects of modern life simultaneously, leading them to believe that external factors beyond their control influence their perception.

Technological filtering of the configuration of the built environment.

The way they perceive and interact with the built environment is heavily influenced by technological filtering. This filtering process is controlled and programmed, shaping what they see and

how they understand their surroundings. Using location-aware technologies, such as GPS or mapping apps, their engagement with these tools further impacts how they navigate and interpret abstract maps. This engagement, in turn, affects the division of their attention within the physical spaces they inhabit.

Subordinating the process of decision-making (and thus power).

When navigating the city, which is essentially a decision-making activity, they are guided and directed by software systems that dictate the preferred paths. As a result, the perception of the cityscape and the way to construct spatial representations are altered. The influence of these algorithms transforms their way of seeing and reshapes their practices in understanding urban spaces.

33. Tamborrino, R. Digital Urban History, and Heritage: Creating Critical Narratives of the Historical City. In international conference Historical City. 2023



Rebuilt from ashes

2.1 Urbicide. War damage to historical buildings and its influence on the community identity

2.2 Post-war reconstruction. Urban regeneration vs saving urban identity.

2.2.1 Architecture and reinhabitation in WW2

2.3 Cultural heritage in post-war recovery.

2.3.1 Architectural intervention to cultural heritage



2.1 Urbicide. War damage to historical building and its influence on the community identity

War has always been associated with loss since the beginning of humanity. As history has shown, conflicts do not provide a definitive judgment on the validity of a cause but rather reveal the victorious or resilient side. In addition to the destruction of human lives, every war or terrorist act leads to the demolition of historical buildings and, thus loss of an essential part of history. But not only. It is not a coincidence that movies that aim to frighten their viewers with apocalyptic scenarios frequently employ the fall of iconic buildings and landmarks as their culminating picture. Why are those images so much more effective and horrifying than those of people dying? This is because they describe the eradication of a whole city, a culture, a country, a civilization, and a way of life. In addition to those who were living very next

to these monuments, entire generations were also destroyed in the process. According to Bevan, the destruction of historical buildings is not merely minor damage but rather the elimination of the memory, history, and identity of the opposite side³⁴.

Erasure of the memory

On the one hand, buildings have always been used as military targets for destruction and devastation in conflicts throughout history. Armed forces have historically destroyed and demolished a region's most significant structures, architectural traditions, and landmarks after obtaining sovereignty, influence, and authority over it, regardless of whether they posed a security danger or not.

34. Bevan, R. *Destruction of Memory: Architecture at War*. 2006.



"Pianist". The film, directed by Roman Polanski, showcases the destruction of Warsaw during World War II, 2002. Source: <https://www.imdb.com/>

“When there is an attack on heritage, the idea is to target something that is”

As though they were announcing the end of a particular culture or regime by this method. The destruction of both people and construction served as a symbol of victory as a whole. However, the objectives of such aggression toward architecture are symbolic rather than physical because the significance it holds for man and community is connected to their collective memory, helps to shape their identity, and encourages their patriotism. So, if identifying the building as a container of memories, then violence against them targets people’s identities and memories³⁴. “When there is an attack on heritage, the idea is to target something that is especially precious to a nation – its collective memory and identity,” says Ducatel³⁶. Every time this identity is wounded, the sense of belonging to the country and

the communal memory is lost. As a result, defeating such individuals becomes more superficial, and driving them from their nation becomes a straightforward process. In other terms, the homeland is the location that protects identity, meaning that a community’s identity cannot be abolished unless there has been complete displacement. However, not all structures and buildings are subject to the systematic damage that occurs in some wars. For the destruction of the buildings to impact people’s morale and resistance, it chooses specific structures that represent genuine symbolic significance and arouse community feelings. The loss of the communities’ cultural legacy will consequently affect their values, customs, and, ultimately, their identity.



Figura 17: “Parallel world” collage by Ugur Gallengus

35. Bevan, R. The Destruction of Memory: Architectural and Cultural Warfare. 2004.
36. Dario, G. World Heritage: Shield or Target? Online article available at: getty.edu



Figura 18: Recovery of Hiroshima city after being hit with atomic bombs during WW2



Figura 19: Buddha statue in Bamiyan. Before and after

The locations that are most commonly attacked in the fights over memory and identity are:
1. Traditional buildings, that contain a vast amount of collective memory passed down through generations.
2. Locations and landscapes that reflect symbolic values ingrained in the consciousness of the populace (unique buildings, memorials, ancient fortresses, natural landscapes, perennial trees, etc.).
3. Structures with a specific purpose that encourage increased interaction with them (such as religious or cultural structures).
4. Structures that become recognizable to people through time (like schools, universities, or institutions).
The regions that are not targeted are those without a distinct identity since they are not regarded as having moral values by the community. As a result, its demolition is not considered a significant shock or an irreplaceable loss. Additionally, newly constructed areas are not included because they lack essential

collective memories. Exceptionally, if specific locations develop strategic value and pose a military threat to the adversary, they might be bombarded. So historical structures are attacked because their destruction is the intended military aim, not because they are in the way of the objective³⁵. Examples from history include the Romans’ destruction of the Library of Alexandria in 48 B.C., the razing of many cities and nations during World Wars I and II, the conflicts between Muslims and Hindus in India from 1947 to 1991, and China’s destruction of Tibet’s cultural heritage between 1949 and 1950. Along with numerous violent incidents against symbolic structures like libraries, mosques, and bridges in Yugoslavia between 1991 and 1999, other violent incidents include the Taliban’s 2001 destruction of Buddha statues in Bamiyan, Afghanistan, the attack on the World Trade Center on September 9th, and finally the destruction of the Shrines in Mali in July 2012 and many others.

“essential for memory and identity”³⁵



Figura 20: "Refugees" Street art by Slim Safont aka SLIM in Kosovo

Destruction of the civilization

On the other hand, during the majority of wars that aimed to destroy memory and identity, besides some buildings and architectural landmarks, sometimes entire urban areas were destroyed as well. This occurs when one civilization is destroyed and replaced by another. As a result, the historic core and the city lose their function and vitality. In particular, it occurs in modern wars, where chemical weapons, radioactive bombs, and targeted biological attacks cause environmental destruction on both natural and anthropogenic systems³⁷, frequently rendering areas completely uninhabitable for an extend-

ed period of time. Aside from their direct effects, such as the eradication of entire ecosystems, conflicts also result in deforestation, water and air pollution, soil poisoning, and desertification, which may lead to the abandonment of habitats, the influx of large numbers of refugees, and the extinction of local economies, traditions, and cultures for entire populations. For example, Serbian soldiers in Kosovo carefully dispersed and leveled towns and whole cities, causing evident harm to the housing stock, infrastructure, and water supplies. Several documents pertaining to private property were lost or destroyed when the Kosovo Albanians evacuated their houses. When refugees decided to return to their homeland, this naturally led to significant issues³⁸. These concerns are intertwined with the flow of refugees who relocate away from their homes and cause difficulty with acceptance and accommodation in the neighboring cities and states. So, dealing with the destruction of buildings and infrastructure in conflict areas and planning the transitional building activity for the large numbers of refugees who cannot be readily assimilated and integrated into the receiving nations result in a double dilemma.

37. Bernard B. Il secolo dei genocidi. Il Mulino. 2006.

38. UNEP. The Kosovo Conflict Consequences for the Environment & Human Settlements, in, United Nations Environment Program and the United Nations Centre for the Human Settlements(Habitat). 2009. Online article available at: unep.org

2.2 Post-war reconstruction. Urban regeneration vs saving urban identity.



Figura 21: Tokyo after great kanto earthquake in 1923

Each city has its unique story. Many natural and manufactured alterations over history have changed how cities were originally planned. And while these cities were gradually developing, they have undergone dramatic and sudden reconstructions because of natural disasters, armed conflicts, or industrial catastrophes. When used specifically in reference to the construction sector and under normal civil circumstances, the term "reconstruction" refers to legal interventions in any constructed environment. Contrarily, when applied to post-conflict situations, rebuilding must be seen as a comprehensive medium- and long-term perspective of environmental, health, and economic challenges that have arisen in conflict zones³⁹. Additionally, it entails data collecting, analysis, and mapping to fully comprehend and be aware of the effects of the restoration efforts of natural ecosystems. Redesigning the urban, industrial, and infrastructural systems should follow this phase. In this process, two perspectives arise.

39. Bernard B. Il secolo dei genocidi. Il Mulino. 2006.

From a short-term perspective, in post-war countries, refugees need immediate hospitality and emergency shelters. Therefore, on the one hand, it is essential to ensure the recovery of entire ecosystems, the cleaning up of vast territories, the restoration of primary living conditions, and the gathering of financial resources for food, energy, health, and social care. On the other hand, in this situation, it is essential to determine the critical values of various types of pollution, balanced by the responsibility and solidarity shown to those who seek to repopulate their area. For example, the concept of “rubble women,” or Trümmerfrauen, appeared in Germany after WW2. The devastated cities were cleaned up and rebuilt by women. Their efforts not only helped restore German communities but also demonstrated that resettling was a community endeavor rather than merely a government one.

From a long-term perspective, after these initial steps have been finished, it is possible to start the building reconstruction, which involves both practical (the gathering of resources and materials) and cultural issues – reconstruction following local traditions or globalization-based building, like in China or Japan after World War II⁴⁰? A successful reconstruction project can combine replacement and conservation techniques to restore the city.

pre-war state or take the chance to clear the area for improvement. Since the end of World War II, this problem has been discussed in every instance of postwar city redevelopment. On the one hand, the act of war causes forced changes in the city’s morphology due to the absence of urban features following the war’s end. According to architectural research, if the city centers are demolished, and the majority of their urban features vanish after the war, new centers must be constructed to fulfill modern needs and diverge from the past, as was the case in Sarajevo, the capital of Bosnia and Herzegovina. However, some studies emphasized the need to revitalize these cities while keeping their unique local identities and relying on the city’s master plan, like in the case of Beirut’s rehabilitation. This technique is costly but frequently appropriate in old towns where tourism may generate cash. They may entail meticulously recreating demolished structures from documented evidence or duplicating the external townscape with contemporary interiors that eliminate the old property divisions. The most recent studies focused on the preservation of what was left of the urban cores of those cities while utilizing prescriptive policies and urban addition to the deteriorating urban fabric of the cities to develop a clear vision for the restoration of wartime cities that finds some palatable conflict between the ancient and the modern.

Successful reconstruction and conservation techniques to restore the city

40. Tortorici, G., Fiorito, F. Building in post-war environments. 2017. Online article available at: researchgate.net



Figura 22: Explosion at the port of Lebanon’s capital Beirut.2020.

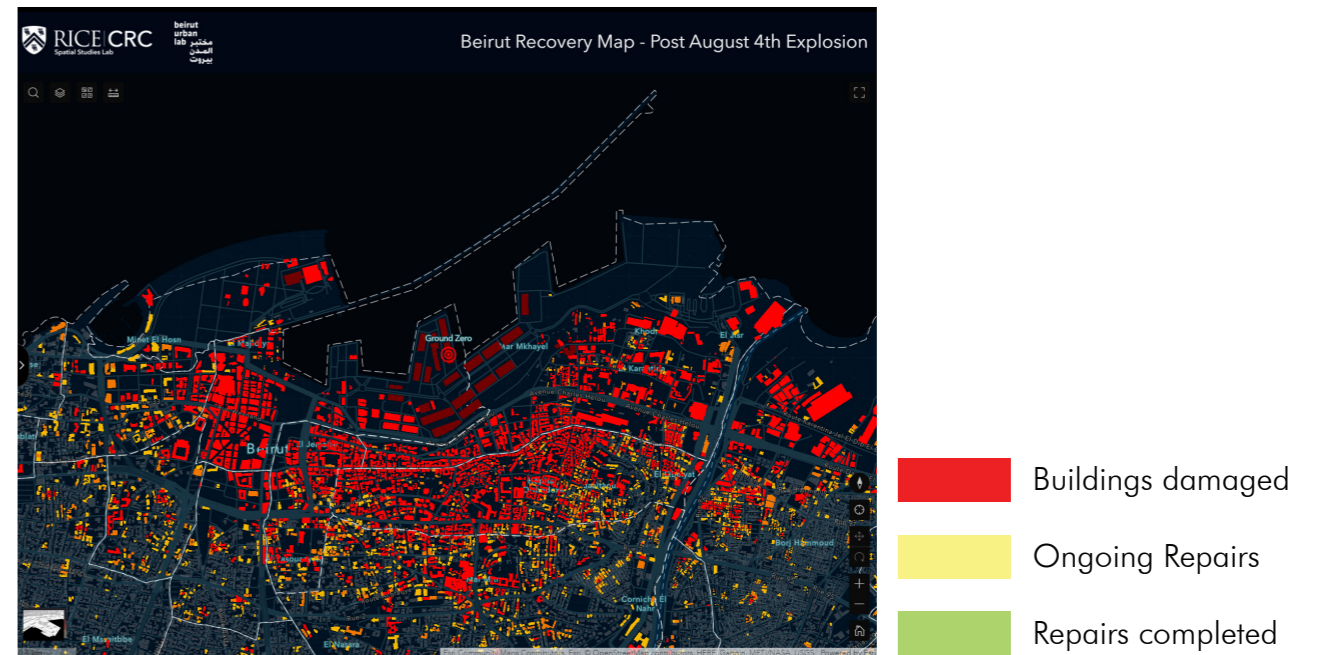


Figura 23: Beirut Recovery Map Post August 4th Explosion

2.2.1 Architecture and reinhabitation in World War 2(WW2)

Everything that has an impact on man—from daily life to tremendous accomplishments to historic tragedies—has an impact on architecture. It is an art form that reflects and responds to his sense of space and his need for a new location to accommodate his shifting needs. While wars demolish urban centers, leaving cities in ruins and survivors traumatized, disoriented, and sad. During the post-war period, cities needed to be rapidly rebuilt because many people were left without housing, and services get damaged.

One of the most recent and extensive war samples is WW2. Following its conclusion, architecture played a crucial role in the process of re-inhabitation. Architects used a variety of techniques and strategies to quickly adapt and meet fundamental human requirements while paying more attention to practicality and efficiency than to aesthetics. Cooperative initiatives were created to deal with the difficulties of rebuilding damaged cities and communities. Architects, planners, and theorists came together in architectural groups like the Congrès International d'Architecture Moderne (CIAM), which was founded on the theories of Siegfried Giedion, an art and architectural historian, Swiss architect Le Corbusier, and the International School with roots in Germany's Bauhaus, to share ideas and formulate principles for urban design and reconstruction.⁴¹ Conservation and restoration methods became crucial during the post-war period. However, ur-

ban planning initiatives were also crucial in rebuilding cities. The Dutch city Rotterdam, which sustained significant destruction, evolved into a prototype for post-war urban design. To preserve historical landmarks while focusing on efficient urban environments, architect Willem Gerrit Witteveen created a comprehensive design⁴². This strategy ensured better living conditions and economic growth, demonstrating the city's tenacity and resolve. Innovative housing strategies were essential to the post-war repopulation. The severe housing shortage prompted architects to investigate novel building methods and supplies.



Figura 24: Plan Witteveen, the first reconstruction plan ,1940

41. Arab Architecture. The impact of war on architecture. 2022. Online article available at: <https://archup.net/the-impact-of-war-on-architecture/>

42. Post-war reconstruction community Rotterdam. Plan Witteveen, the first reconstruction plan. Online article available at: wederopbouwrotterdam.nl/en/articles/plan-witteveen

Le Corbusier's residential approaches

During World War II, Le Corbusier created the "Modulor" scale to balance architectural details with human proportions. He improved this in 1950 and used it in all subsequent designs. Although his planning suggestions for La Pallice-Rochelle and Saint Dié were initially disregarded, they later gained recognition. He created a residential complex in Marseille that embodied his idea of a social environment with assistance from the government. It was a 1,800-person "unité d'habitation" with 23 duplex designs and shared amenities like shops, a school, and an outdoor theatre⁴³. Similar structures were constructed in West Berlin and other French cities after their 1952 completion⁴³.



Figura 25: L.C. Unite d'Habitation.1952

43. Kathleen, K. Architecture at the turn of the 21st century. 2013. Online article available at: bri-tannica.com/art/picturesque

The role of architecture in community building

In the years following World War II, the importance of architecture in fostering community and healing was also clearly apparent. A prime example is the restoration of Croatia's historic city of Dubrovnik to its pre-war condition despite more effective contemporary solutions being available. This architectural choice showed a dedication to preserving cultural memory, aiding community rehabilitation⁴⁴. It was a crucial architectural strategy that balanced inhabitants' psychological needs with their physical ones.

Public spaces and places for social interaction were also important to the restoration of society. After suffering significant wartime devastation, Berlin's Tiergarten Park was restored as a green haven for locals, encouraging social interaction and leisure activities⁴⁵. Similar improvements were made to Sydney's Royal Botanic Gardens, which now serves as a metaphor for the city's renewal and promise.



Figura 26: Tiergarten park in Germany

44. UNESCO World Heritage Centre. The Old City of Dubrovnik. Online article available at: whc.unesco.org/en/list/95

45. Lingenauber, K. Post-war Green Spaces – Recent Restoration and Upgrading Projects in Berlin. 2020. p. 78. Available at: journals.ub.uni-heidelberg.de/index.php/icomoshefte/article/view/75100/68773

2.3 Cultural heritage in post-war recovery



Figura 27: Statues in Ukraine's capital Kyiv protected against Russian attacks with sand bags. 2022

War and cultural heritage can both be seen as extremely flexible and connected societal transformation processes. If on the one hand, cultural heritage contributes to the protection of the identity, and history of the society, while on the other side, wars destroy this identity or create a new identity. However, awareness of the value of cultural heritage was heightened only after Second World War, when massive cultural heritage destruction occurred. Since then, cultural heritage has been protected internationally in times of war, just like civilian populations. As Nathalie Ducatel, a conservation instructor at the HE-Arc, explains, "Countries

started to realize that heritage needed to be looked after and dealt with at the international level towards the end of the 19th century given the collateral damage that was becoming more and more significant in modern warfare.⁴⁶" After the Second World War, The United Nations developed and established UNESCO, or United Nations for Education, Science, and Culture. This agency creates manuals and literature relating to world heritage conservation and administration. ICOMOS (International Center of Monuments and Sites) was created during this period by UNESCO to protect cultural heritage. Meanwhile, the first international

46. Pauchard, O. When cultural heritage becomes collateral damage in war. 2022. Article available at: swissinfo.ch/eng/culture/when-cultural-heritage-becomes-collateral-damage-in-war/47511316



Figura 28: Palestinian girl in a refugee camp with a key of her grandfather's house.

agreement to protect cultural heritage was passed in 1954 with the adoption of the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict. The ICOMOS has created all known charters known as the World Heritage Convention 1972, which organize dealings with heritage buildings and develop the modern idea of conservations⁴⁷. These charters have been made since 1930 till now. Since the Second World War, the Hague Tribunal's prosecution of the Dubrovnik Four (four former Yugoslav army officers) was expected to mark a turning point in the preservation

and restoration of cultural heritage, as it was the first time that military commanders had been accused of an attack on the cultural property as a war crime. Even with all these precautions taken to protect cultural property before, during, and after armed conflict, the recovery of cultural assets has been difficult⁴⁸. This was most obviously shown by the prolonged Israeli occupation of Palestinian territory, the Iraqi invasion of Kuwait in late 1989, and the numerous violent identity crises that broke out during the 1990s. Therefore, it is crucial to look at how cultural heritage protection and recovery can be enhanced by understanding its deeper relationship with modern warfare and highlighting the primary persistent flaws in the implementation of international policy. Cultural heritage in post-war recovery is a challenging topic to analyze since, during times of death and destruction, humans are prioritized over all else. The immediate human necessities of shelter, food, and health take precedence with the cessation of active conflict and the beginning of rehabilitation. Respecting the memories of the dead is also necessary. None of this can be denied, and neither should it. During such a period, a focus on cultural heritage risks coming off as unconcerned with these issues. However, cultural assets must be seen as a vital component of the rehabilitation process when an armed conflict is over and not as an extravagance to be addressed later.

47. Petzet, M., Ziesemer, J. International Charters for Conservation and Restoration. Available at: openarchive.icomos.org/id/eprint/431/
 48. ICCROM Conservation Studies 6. Cultural Heritage in Post-war recovery. p. 44-45.

It is believed that restoring consistency to people's daily life should be a top concern. One aspect of recovering cultural identity is the restoration of nationally significant monuments or the return of looted treasures. As a result, critical recovery plans must consider the importance of people's homes and lands and the widespread desire to instantly restore traditional practices.

Local participation

Cultural heritage recovery should be founded on a clear vision of future recovery scenarios as seen by local groups and external players since it is an essential component of a holistic strategy for postwar reconstruction. A local perspective frequently differs from an international or global one. What people decide to keep from their past is determined by circumstances and the memories people associate with specific artifacts and monuments. Furthermore, it is always illuminating to be reminded that "not all societies use the remains of the past as a means of substantiating their identity."⁴⁹ In some cases, where the past only evokes negative emotions, identity is defined by "the modernist drive towards the future." In other cases, poverty, in addition to the repercussions of conflict, leads to the looting and exportation of cultural property to meet the demands of a select few wealthy people and a burgeoning market of collectors. In the meantime, the past serves as a constant "precedent for modern events" in the nation, and as a result, "various interests rely on dif-

49. Layton, R., Thomas, J. Introduction: the destruction and conservation of cultural property. 2002. p. 1-21

2.3.1 Architectural intervention to cultural heritage

The notion of reconstructing or rebuilding is not new. Its beginnings can be found in the nineteenth century when, due to the quick industrialization of civilization after the Second World War and the ensuing rift with the past, the idea of "heritage" was introduced, and the consciousness of the past was developed. At that period, the idea of restoration was in between two opposing views: the "restoration" movement by Viollet-le-Duc and the "conservation" movement led by John Ruskin⁵⁰.

Viollet-le-Duc is an architect and theorist best known for his extensive restoration work at Notre Dame. According to Viollet-le-Duc, the restoration of historical buildings may assist in preserving the beauty and maintaining the style of a certain period. As he wrote, "Restoring a building is not sustaining, repairing, or redoing it. It is restoring it to a complete state that may never have existed at some point⁵¹". In comparison, Ruskin's genuine attitude toward restoration was more like terror than mere hatred⁵². He was unam-

biguous that no one could recreate the heritage building's original beauty since he described the restoration as a trial to save the people from death. Even though Rubin's view was focused on preserving the identity of the historical buildings, it did not correspond to the current requirements. Throughout history, rebuilding programs have taken various paths to restore lost architecture. Historical buildings were rebuilt to resemble their pre-destroyed self, completely depart from their past, or could combine both destruction and rejuvenation. The historical center of Warsaw is one of the reconstruction projects for post-conflict cultural heritage that has been restored without changing or adding anything new to the buildings.



Figura 29: Spanish Hospital of Castello Sforzesco. 2020

The Spanish Hospital of Castello Sforzesco

Spanish Hospital was utilized as a military hospital for Spanish soldiers till 1970s. Subsequently, after independence, the hospital was abandoned and only in 2015 it was redesigned by Michele de Lucchi to host the famous masterpiece of Michelangelo, Rondanini Pieta.

50. Ruskin, J. The seven lamps of architecture. 1849. p. 11-21
51. Scott, F. On Altering Architecture. 2007. p. 45
52. Scott, F. On Altering Architecture. 2007. p. 49

Even if restored works are falsifications, they nonetheless convey a feeling of history and ongoing presence despite the intervening events. This method was used in much of post-war Europe to recover lost identity and history.



Historical Center of Warsaw
Generally, conservationists are against to total restoration of the building. However, Warsaw's historic center was one of the exceptions that have been totally rebuilt to its previous shape, as its extensive reconstruction was viewed as a representation of the nationalism of the Polish People⁴.



Figura 30: The Resurrection of Warsaw after the Second World War



Figura 31:Reichtag Building

However, as time passes, restoration theory includes not only benefits related to the building but also considers overall benefits, including owners and users, energy and economics, etc. From an architectural point of view, nowadays, most modern architects believe that if new construction were to be done in a historic structure, it should be done in a contemporary style. Firstly, because there should be a clear boundary between the old and the new, and secondly, it tends to be simpler to find finance for a new addition rather than restoration of an existing building. However, another issue emerging with this approach is reach-

ing architectural integrity between the old and new buildings. Therefore, it is crucial to analyze each component of the historical building and evaluate the new structure in relation to the current conditions of the old site. From an ecological point of view, historical buildings can be rehabilitated by recycling some original materials with new ones, which might contribute to sustainability. In addition, reusing original materials could also retain the image and the psychological sense of traditional architecture.



Reichstag Building
The prestigious Reichstag Building in Berlin was destroyed by the war and had a Soviet flag flying from its roof. Renovations started soon after the war ended and have continued ever since. The German house of parliament, known as the Reichstag Building, was refurbished by Sir Norman Foster while maintaining the original structure's architectural design. However, a massive glass dome was added as a modern addition to the roof.

After the Second World War, Germany pioneered recycling war demolition debris to address the issue of disposing of a significant volume of war-related waste while also producing raw materials for reconstruction. During World War II, Dresden was firebombed, and the largest-ever rebuilding efforts in Europe were made to restore numerous historical structures.

pending on the level of demolition, there are methods for reducing waste and reusing as many materials as feasible⁵³.

There has been a lot of research on recycling building waste in developed nations, and it has shown that new ones can sometimes replace old materials. De-

53. Khaled, I. N. Ahmed. Reuse of Demolished Building's Debris in Post-war Construction. Online available at: khalednabil.net/papers/PostwarConstruction2007.pdf

Metamorphosis of Space

3.1 Reuse to reinhabit

3.1.1 Adaptive Reuse revolution

**3.1.2 Reuse issues of heritage buildings
Vernacular or formal adaptation.**

3.1.3 Reactivation strategies of buildings

**3.2 Influence of adaptive reuse on
community and its regeneration**

**3.3 Adaptive reuse in contemporary world.
New trends in adaptive reuse**

3.4 Case studies of adaptation



3.1 Reuse to reinhabit

Reuse, remodeling, recycling, re-reading, reactivating, re-writing... - are different terms used by researchers to define adaptive reuse practice, which can be summarized as a design-based intervention aimed at revitalizing the building-often abandoned or misused for historical, artistic, cultural, or economic reasons, and decided not to be demolished for its identity/value. Today the concept of adaptive reuse is interpreted differently, involving various types of architectural assets, despite the size, function, or location, including open spaces, gardens, urban interstices, or squares.

The idea of adaptive reuse went beyond solely design-related and architecture-oriented considerations. Recent reuse practice, different from a pragmatic approach, is a more complex process primarily aimed at rehabilitating, reactivating, and re-inhabiting the building.

In architecture, the term rehabilitate is used to describe the process of intervention to structure for its recovery. However, in addition to its academic description, rehabilitation can be considered an act of respect toward history and predecessors and responsibility toward future generations. It is a tool to preserve memory, conserve history, and protect the building. One of the main goals of adaptive reuse projects is to reactivate the building within its context to secure maximum cultural, economic, and or social benefits. Therefore, conserving the building to some extent, reuse projects may consist of different interventions- some may be ephemeral. In contrast, others are permanent, involving projects based on new function applications, art, or temporary assets.

Generally, this reactivation results in functional, technological, and spatial upgrades of the existing space.



"Fly Away". Photograph from the Lan Wei (Unfinished) series, by Stanley Wong (2006). Source: www.mplus.org.hk



Ultimately, adaptive reuse intervention attempts to make the building re-inhabited again or nourish the relationship between the structure and its users, as it is the most potent chemistry. Initially, the word “to inhabit” comes from the Latin verb “habitabile,” which means “to possess, to have.” In Italian, “abitare” means “to dwell.” The terms “inhabitation” and “dwell” are not solely the production of a place to dwell but also a place to experience, live, and

make it one’s possession by enjoying the social points of doing so. At the same time, re-inhabiting means re-living something by altering its function. So this approach invites a new way of thinking and practicing interior architecture: it is not so much assumed as the act of designing “inside” of something, but instead based on the approach of the design process as “ an enfolding and fabrication of space which makes inhabitation possible”⁵⁴.

54. Attiwill, S. Working space: Interiors as provisional compositions. In *Occupation: Negotiations with Constructed space*. Conference Proceedings University of Brighton. 2009.

3.1.1 Adaptive reuse revolution

However, the concept of adaptive reuse was initially directly linked to conservation-oriented architecture and planning, which emerged as a reaction against “clean-sweep” planning; and focused on reusing rather than replacing the buildings in the 1950s and 1960s. The newly emerged movement was oriented toward saving pre-existing old buildings and was named adaptive reuse⁵⁵. Since 1970, a strong focus has been on writings regarding the protection of old buildings and the importance of adaptive reuse for the preservation of cultural heritage and making “a good city.” As Jane Jacobs wrote that old buildings are essential for dynamic

urbanism⁵⁶. This literature created possibilities to practice studies in architecture. Carlo Scarpa projects, such as Castelvecchio Museum, are considered talismanic in this process. During the 1980s and 1990s, influenced by industrialism, creative approaches, practicality issues, and conservation principles, adaptive reuse was implemented on abandoned industrial buildings and structures⁵⁷. In the past twenty years, however, the practice has widened the spectrum in architecture, involving from starchitects to community-generated projects, with a recent shift in the investigation of adaptive reuse more conceptually.



Figure 32: Museum Castelvecchio, adaptive reuse by Carlo Scarpa in 1963

55. Powell, K. *Architecture Reborn: The conversion and reconstruction of old buildings*. 1999. p.10.

56. Jacobs, J. *The Death and Life of Great American cities: the Failure of Town Planning*. 1961.

57. Cantacuzino, S. *New uses for old buildings*; Kidney, W. *Working places: the Adaptive use of Industrial buildings*. 1976.

3.1.2 Reuse issues of heritage buildings. Vernacular or formal adaptation

Selection of a new function for the heritage building is a crucial moment in the decision-making process, as deciding the most appropriate use within the context is essential to preserve the cultural and social value of the historic building. Historic buildings should be analyzed in depth since many factors influence the process, such as heritage values, characteristics, and potentials of the historic building and the community's requirements.

The most important mistake in the adaptation of historic buildings is the random decision of the new use of the heritage building without holistic analysis. The analytic and scientific approaches should be the basis of the decision-making process. Otherwise, social and economic issues may cause the building to be disused, or the new function may damage the identity of the heritage building. In addition, it has been more crucial to adapt the functionality to the existing architectural styles than the other way around. The chosen functions are inadequate if these activities include materials that are significantly altered in structure, morphology, environment, or other factors.

However, the discussion of involving the community is a more recent development. Local communities are becoming more aware that the protection of specific places and sites may benefit future generations but that inappropriate new uses in adaptive reuse may harm or even exclude them. Along with this community-led approach, there is a growing focus on non-expert, non-specialized conceptions of heritage and the shared values these

perspectives reflect. Researchers and policymakers are confident that incorporating communities may generate chances to accomplish social sustainability goals, including equity, well-being, social cohesion, and inclusion, in addition to place-based bottom-up activities.



Figure 33: Community members are encouraged to create new uses for the vacant building as part of the "I Wish This Were A..." project in Lansing, Michigan.

Deciding the most appropriate use within the context is important to preserve the cultural and historical value of the historical building.

Summarizing all, in current practices, the conservation of heritage buildings is strongly considered, and a considerable amount of funds is spent on the adaptive reuse processes. Therefore the project must be economically, socially, and physically sustainable. A successful adaptive reuse project reflects the historical values of the building and also improves and adds a contemporary layer to the building instead of destroying its identity. However, no unique methodology can be applied to the adaptive reuse project of the heritage building since each historic building has special conditions that distinguish its issues from other construction.

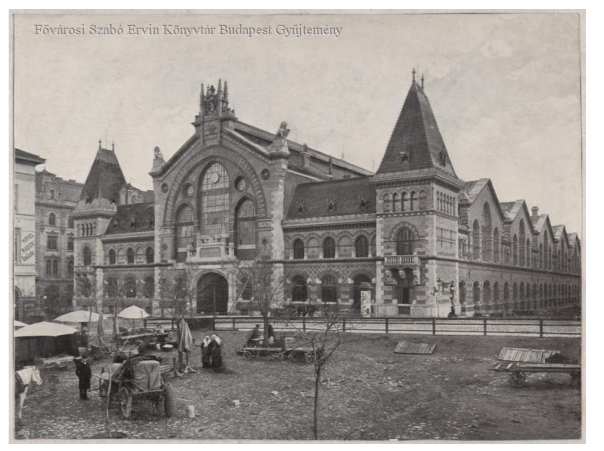


Figure 34: Great Market hall. Adaptation of the building to community requirements, while preserving the identity of the building. 1990s

Vernacular or formal adaptation

Over the last few decades, adaptive reuse has become a highly specialized practice with a steady rise in the number of projects in architecture and conservation. However, in parallel to it, people continue to reuse buildings in various informal ways, adapting them according to their needs. This process is called “vernacular adaptation,” which was introduced in the book of Fred Scoot, “On altering architecture.”

Altering buildings with spontaneous intervention is not a new phenomenon; in the past, the buildings were considered a material resource and were adapted to new functions without questions. The motivation behind this kind of alteration was economic or functional⁵⁸, in essence, as it was easier to reuse an existing building than construct a new one. For example, during the Renaissance period, ancient monuments were adapted to new uses, or during the French Revolution, religious buildings were reused for military and industrial uses⁵⁹. However, these buildings were generally altered pragmatically without considering their heritage value and preservation.

Samples of such user interventions can still be observed in the contemporary world, in historical buildings, or interior spaces. One of which is the historical center of Split which contains the ruins of the ancient palace of Diocletian and Piazza del Anfiteatro in Lucca, where a group of refugees constructed their houses on the ruins of the former amphitheater in the 6th century. The user intervention took

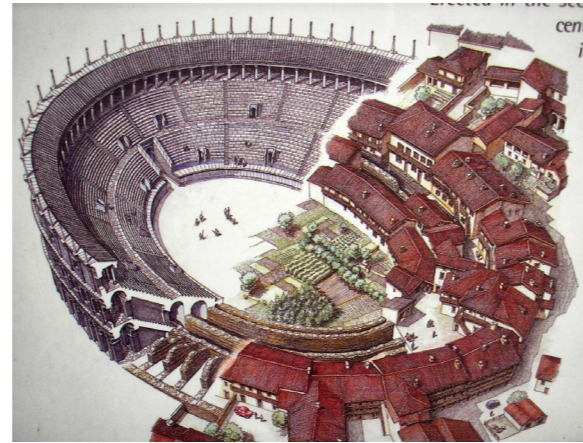


Figure 35: Amphitheater in Lucca



Figure 36: Diocletian and Piazza del Anfiteatro in Lucca today

place gradually on the site, corresponding to the needs of its inhabitants, but also caused social stratification among them. Today this historical place is a palimpsest that conserves elements of its vernacular adaptation of different periods. The site is now protected by UNESCO as a World Heritage Site.

58. Powell, K. Architecture reborn. Converting old buildings for new uses. 1999.

59. Cunnington, P. Change of Use: The Conversion of Old Buildings. 1988.

However, vernacular adaptation has a strong social impact on the adaptation process. It plays an important role in building an intensive relationship between a user and the space, as the user is directly involved in the “adaptation” of the space to the new function and its contemporary history. Recently this practice has been used by the “creative class” of the community for initiating artistic, cultural, and social activities⁶⁰, which positively contributes to the gentrification process. One such social-cultural user-led interventionist, Kunsthaus Tacheles in Berlin, was seriously damaged after WW2. After the fall of the Berlin Wall, a group of artists transformed the ruins into an art center, “Kunsthaus Tacheles.” This project became one of the most important cultural

centers in Berlin in the 90s, which led to the recognition of the social, architectural, and historical values of this site. There were many other projects in Berlin, such as Kunsthaus Tacheles, that contributed to the “sense of place” or offered added value to the city.

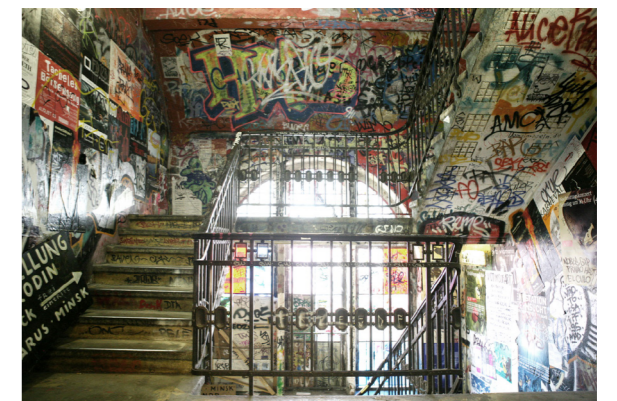


Figure 37: Kunsthaus Tacheles, 2018

60. Douglas, G. Do-It-Yourself urban design: The social practice of informal “improvement” through unauthorized alteration. City & Community. 2013. p. 5–25.

This approach may also reflect another disadvantage that vernacular intervention may cause, which is the reuse of the building as a “camouflage” for commercial use⁶¹. Generally, community-based projects, which are financial support from commercial and governmental agencies, are not always inclusive to engage all categories of the community but may instead involve the well, educated people. For example, initially, in the Off Piotrkowska, user-created activities and the site’s atmosphere created a sense of authenticity” in the space. However, after two years, the area experienced symptoms of gentrification: more expensive shops, bars, and restaurants that attracted wealthier customers, or the vintage furniture was carefully replaced by fashionable ones.



Figure 38: OFF-Piotrkowska

61. Schaller, S. & Guinard, S. Pop-up landscapes: A new trigger to push up land value? . 2017. p. 1–21.

3.1.3 Ractivation strategies of buildings

“ A building conversion involves a complex interaction between old and new, before and after, and all points, including a strategy until it eventually reaches the end stage.⁶²” Once the proper role of the building has been decided upon and established, various strategies and methods can be utilized, and many researchers concentrate on this component of the adaptive reuse process. The term “strategy,” which is derived from the military planning field, refers to a plan to accomplish a task, frequently in the face of uncertainty. Even though many authors investigated different strategies, without a doubt, Brooker’s work had a significant impact on the direction of this field’s study.

Ultimately, investigating the specific contribution of interior architecture to adaptive reuse, Brooker points out that interior architecture or interior design/decoration are all very closely related fields that deal, in varying degrees, with the alteration of a given space⁶³. As a result, in one of his last books, “Adaptation Strategies for interior architecture and Design,” Brooker proposes eight strategies and brings together important themes and ideas, such as recycling, sustainability, temporality, continuity, layering, and so forth⁶⁴. The strategies are: 1. re-programming, 2. intervention, 3. superuse, 4. artifice, 5. installation, 6. narrative, 7. on/off-site, 8. insertion.



62. Verlag, H.C. The language of conversion, the Conversion of Language in reduce, reuse, recycle. edited by Petzet,M. and Heilayer,F. 2012.
 63. Brooker & Stone. 2010b. 2010. p. 46.
 64. Graeme, B. Adaptation strategies of interior architecture and design. 2017.

Re-programming

Relationship between the pre-existing building to be reused and the new intervention: elevation of negative history of pre-existing building.

Reprogramming is putting anything to new use, whether an object, structure, or idea. In design, reprogramming is a strategy that can be utilized to recolonize areas that may have experienced a challenging or atypical past when a building no longer serves its intended purpose. The prior usage of a building may be viewed as obnoxious or revolting for a variety of reasons, including economic, cultural, social, and more. A building that has been ideologically dominated or subjugated and has a disagreeable political history or an unpleasant past function, such as a hazardous factory or an abattoir, can be reused in a way that contradicts its own history.

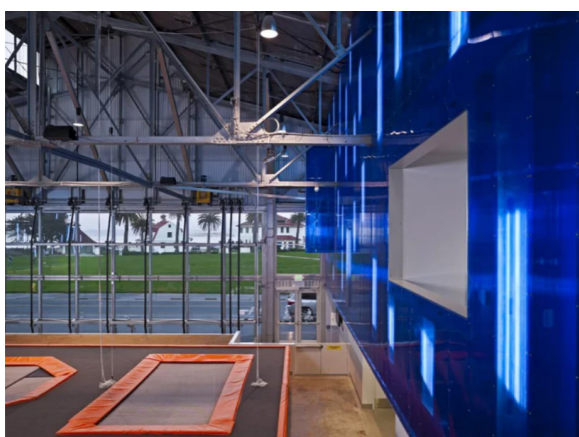


Figure 39: **House of Air**

A new trampoline park has been built within an old airplane hangar. Its decontamination was a necessary step in the process of altering its intended use because it was covered with hazardous lead paint and aircraft gasoline.

Intervention

Relationship between the pre-existing building to be reused and the new intervention: to support buildings that are almost destroyed.

Intervention is a method that can combine the new components of the new function with the pre-existing building, but always in a very distinct and transparent way. This strategy entails the forceful and frequently cruel imposition of the new into the old while subtly creating a space where both are commonly merged. To build a sufficient and adequate base for the intervention, an interventionist approach, as Fred Scott points out, might lead to a surgical-like methodology or process that may involve repair and/or selective demolition⁶⁵. However, the new work will be closely related to the old since the existing structure frequently provides a set of ambiguous rules for the intervention's designer to interpret for how the existing space may be repurposed.



Figure 40: **Astley Castle**

A new masonry armature framework that strengthened and stabilized the original collapsing ruin of the castle building was constructed in its place.

65. Scott, F. *Alternative Scott*. 2008.

Superuse

Relationship between the pre-existing building to be reused and the new intervention: recycling pre-existing materials of the building.

Superuse is a term used by 2012Architecten in Holland to describe the upcycling of uncommon materials and subsequent transformation of those materials into a space. It is a strategy with clear sustainability credentials and is concerned with the affordability of materials, durability, the value of products during their lifespan, and consumption patterns. Superuse has connections to both recycling and upcycling; it uses found things and can thus occasionally include unexpected parts that are modified and incorporated into interior spaces, frequently for their striking features.



Figure 41: **HAKA Recycle office**

A wall made of recycled clothing encircled the theatre, while the seats were created from recovered wood.

Artifice

Relationship between the pre-existing building to be reused and the new intervention: duplication of lost/ruined cultural elements inside the space.

The word "artifice" is defined in the Oxford English Dictionary as "the craft of the technician" or "the art of construction." An "ingenious expedient, a move, trick, or gadget" is another way to describe it. According to the etymology dictionary, the word "artifice" comes from the Latin word "artificum," which refers to "the utilization of the art of cunning." Both definitions imply that the term "artifice" refers to something that has been constructed or put together to convey meanings, sometimes with the goal to deceive, seduce, or mislead its audience. Artifice-made interiors can be planned to fool, imitate, or copy the existing places.



Figure 42: **Getty Villa**

Duplication of Famous art works in the villa. Works of art are no more considered as works of art, as they are copies. But they are useful, to create the content of that period, for exam interior of roman period.

Installation

Relationship between the pre-existing building to be reused and the new intervention: Creation of temporary use of the space.

An installation is an “event-“based method that examines the extraction of drama and amplifies the contrast between the old and the new. It includes the creation of often installed places that are not site-specific, are considered temporary, and are frequently constructed with short lifespans in mind. The work will breathe new life into the structure and bring to light its true character, which may have been lost or disguised. It is mainly used for large and small-scale events that aim to have the least structural impact on the existing building. The installation or interior is typically taken down as fast as it was put up after it has reached the limit of its impact, is thought to be out of style, or is no longer needed for the duration of the event.



Figure 43: Duomo Cathedral museum
The 26 rooms of the new museum are thoughtfully organized around a path that circulates visitors through the museum, and back to the same starting place without ever having them take the same path twice.

On/off site

Relationship between the pre-existing building to be reused and the new intervention: Bcs of the various reasons to produce new elements off-site.

This method typically entails fabricating items, parts, spaces, or even structures near or far from the host building, such as a factory, before they are shipped there and assembled. This pre-made solution may be utilized for a number of reasons, including the site’s complex state, the availability of resources, and the project’s economics. Since they can be easily replicated and put together, interior parts that are modularized and standardized throughout batch manufacturing will typically be more cost-effective than those that are constructed on a one-off or bespoke basis.



Figure 44: Dovecote studio
By carefully placing a prefabricated steel home into the stabilized crumbling ruins of the old dovecote, the one-story brick building was converted to serve as an artist's studio.

Narrative

Relationship between the pre-existing building to be reused and the new intervention: creation of storytelling of the pre-existing building.

Narrative is a method that enhances the storytelling potential of the current area and can be used to create environments that are intended to tell and improve particular stories about locations, objects, and their inhabitants. Existing interiors have a past that can occasionally be incorporated into the design of a new interior through the telling or relaying of a story. Unique interior spaces might result from improving and developing an environment’s narrative. This strategy is a tool that can be used as an organizational tool and to drive a conceptual idea.



Figure 45: Shoah Memorial
Visitors to the Shoah memorial are welcomed by the "wall of indifference." They are repeatedly reminded of the building's role in Mian's history as well as the locals' complicity. Steel walkways that are themselves powerful metaphors of change and mobility for the story of the interior space aid the trip into the memorial.

Insertion

Relationship between the pre-existing building to be reused and the new intervention: Completing structural elements of the building before new use.

Insertion is the process of generating interior space through the use of a method that encourages the installation of built-to-fit components. A procedure of inserting something inside, between, above, below, around, or on top of an existing area is suggested by the term “inserted interior.” The new element(s) will be purposefully created to contrast with the context in which they are put, while the hosting space will frequently dictate the shape and scale of the new insertion.

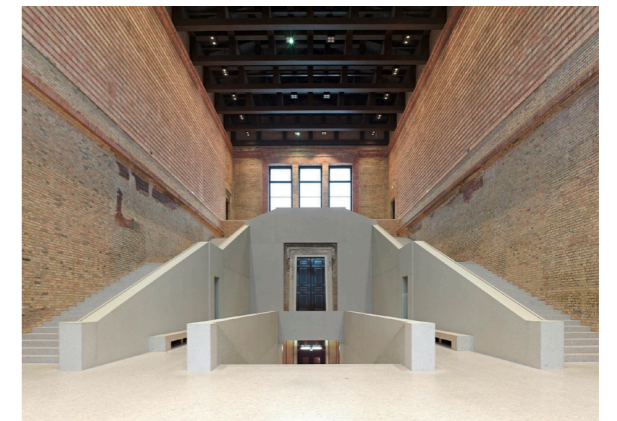


Figure 46: Neues museum
The staircase of the museum was ruined during the WW2. In order to retain the spirit of the ruin, and bring functionality of the space, the architect adapted historical staircase with new materials.

3.2 Influence of adaptive reuse on community and its regeneration

The city is a complex mechanism that facilitates the coexistence of the past and present, uses and ages, and its identity is mirrored in the historical availability of the area. However, in the current world, where cities are rapidly changing, it is challenging to preserve the identity of the cities or focus on the relationship between the city and its inhabitants. From this perspective, adaptive reuse is identified as a crucial strategy that exceeds the benefits related to efficient resource utilization and climate mitigations but also as an opportunity to enhance the role of the community, revitalize neighborhoods, and develop the quality of living, by decreasing the gentrification issue.



Figure 47: Herman Hertzberger's Centraal Beheer Building is transformed into a new residential district, Apeldoorn

Sense of belonging, which is best defined

Enhancing the role of community

Historical buildings, embedded in the collective memory of the communities, create the identity of the place. Once this bond breaks down and places lose their identity, people lose their sense of belonging to those places. Therefore, in responding to all newly emerging issues and requests of old and new inhabitants, adaptive reuse can be seen as a strategy that is related to place, memory, and identity and contributes to fostering intergenerational and intercultural relationships in the context of a society that is becoming more complex and heterogeneous. It might also have a significant impact on the promotion of an idea of "citizenship" that isn't just based on political, ethnic, or birth origin but also on urban connections and a sense of belonging, which is best defined as a collection of "emotional ties that lead to emotions of being at home." In addition, the preservation and reuse of historical buildings will enhance the lifestyle both of current and future generations by modifying the space to become useable and accessible for residential and/or commercial purposes. For example, redevelopment, heritage tourism, and new life can all be brought to a community through a practical adaptive reuse project. These advantages also apply to historical structures, such as enhancing the building's commercial viability and lower maintenance costs⁶⁶.

Thus, heritage building adaptation will improve not only the sustainability and livability of the local communities but will also promote sustainable economic, social, and environmental development⁶⁷; it is a tool for managing and growing the urban area⁶⁸. Numerous research initiatives supported by the EU, including ROCK (Cultural Heritage Leading Urban Futures), CLIC (Circular Models Leveraging Investments in Cultural Heritage Adaptive Reuse), and OpenHeritage⁶⁹, introduces adaptive heritage reuses as a strategy to create space with a good social impact, a low intervention plan, and an involvement of neighborhood and historical groups to identify and maintain what people deem significant about the buildings and locations.

66. Gosling, J.; Sassi, P.; Naim, M.; Lark, R. Adaptable buildings: A systems approach. *Sustain. Cities Soc.* 2013. p.7, 44–51.
 67. Abdulameer, Z.A.; Abbas, S.S. Adaptive reuse as an approach to sustainability. *IOP Conf. Series Mater. Sci. Eng.* 2020.
 68. Plevoets, B.; van Cleempoel, K. *Adaptive Reuse of the Built Heritage.* 2019.
 69. ROCK, "Cultural Heritage Leading Urban Futures."

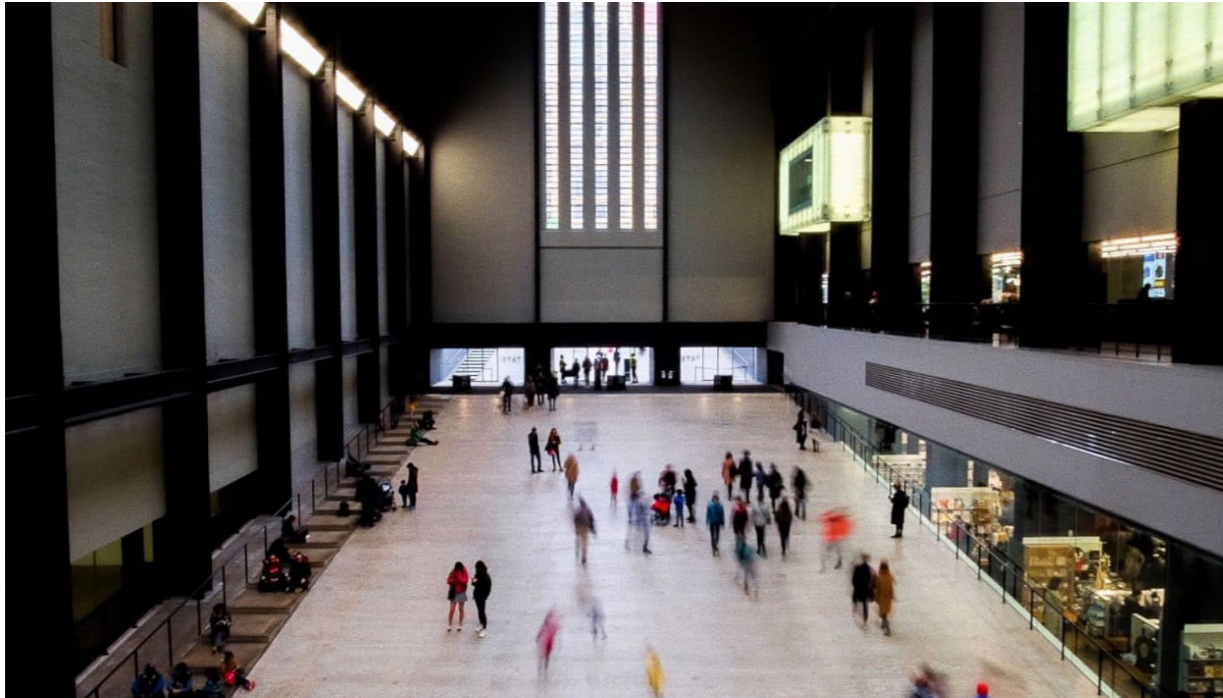


Figure 48: Tate Modern, London Beiling located in a former power plant, The Tate Modern offered a captivating style of museum construction. With the ambitious goal of promoting regeneration in South Bank, the conversion of the structure into a museum of modern art was intended to have broader urban implications.

Revitalization of the neighborhood

Adaptive reuse is not just seen as an approach to revitalize specific structures of plots of land but also to offer areas and services that cater to crucial social needs in urban and rural neighborhoods. According to Jason Reece, neighborhood revitalization fosters social relationships, grows institutionalized networks and services, assists already established neighborhood businesses, and provides inhabitants with more opportunities⁷⁰. For example, by developing abandoned buildings, tourism attraction in the neighborhood can increase, which can lead to new vacancies. Neighborhood revitalization through adaptive reuse has gained prominence since the beginning of the 21st

century. This is linked to the increase of the population in the metropolitan area of the big cities, where the number of shrinking areas is increasing. In shrinking areas, the main issue is depopulation due to the lack of job opportunities or emotional links to the area⁷¹, which causes difficulties in maintaining social and public infrastructure. However, implementation of the adaptive reuse strategy could result in more(high-quality) spaces for neighborhood-based businesses and entrepreneurs, as well as additional places for social services, all of which could improve social and economic prospects for current residents.

70. Reece, J.Revitalization without Gentrification. 2021
71. Hollander et al.Planning Shrinking Cities. 2009.

Assist on the issue of gentrification

Geographically uneven development patterns in metropolitan areas have led to rising land and real estate prices in expanding urban areas that support gentrification dynamics. From this vantage point, an important concern for adaptive reuse initiatives is how neighborhood revitalization may mitigate shrinkage tendencies while avoiding gentrification dangers.

According to the traditional definition, the initial stage of gentrification typically included the appropriation of abandoned buildings in urban neighborhoods by persons with high cultural capital, such as young artists or students or other creative groups⁷². Eventually causing the displacement of inhabitants by the wealthier people. Some scholars believe in the contribution of adaptive reuse in social services in terms of "equitable development" or "community development," particularly for low-income inhabitants, with the demand for affordable housing and community spaces, to prevent gentrification and displacement⁷³.

initial stage
gentrification
typically included
the appropriation
of abandoned
buildings in urban
neighborhoods by
persons with high
cultural capital

72. Glass,R. Aspects of Change. 1964.
73. Hollander et al., Planning Shrinking Cities. 2009.

3.3 Adaptive reuse in contemporary world

New trends in adaptive reuse

As the world was aging entirely, more and more historically significant buildings began to require rehabilitation and revitalization; adaptive reuse was the strategic decision to preserve the past while making visions for the future. For instance, many adaptive reuse projects connect other cultures by transforming churches into restaurants, hospitals into schools, and more. However, in the contemporary world, adaptive reuse policy is increasingly more prevalent⁷⁴. Most researchers who have written about adaptive reuse in the past ten years support its critical role in responding to many of the issues presented by the modern world. For instance, European Union is creating policy in this field and sponsoring research and innovation initiatives through its Horizon 2020 program or in many universities, and adaptive reuse has started to take center stage in architectural education⁷⁵. In the recent period, adaptive reuse has shifted to innovative technologies and sustainable design⁷⁶.

Modern society's necessities and uses have changed over the past years. Due to how the environment has changed over time, the standards are new and more stringent: greater safety, better quality, and more peace of mind. And this is where innovation plays a crucial part. For

example, more and more religious buildings or theaters are getting abandoned since they are not in demand as in the past. Therefore it is believed that one of the sustainable approaches is to adapt buildings with a mix-used approach rather than with single-use. Everything was also influenced by the internet. Mostly the way we buy and sell things has been significantly impacted by digital technology. Numerous abandoned malls have been transformed into different spaces. The amount of area required for retail distribution is growing simultaneously. According to Coresight Research, Amazon has turned 25 mall spaces into distribution centers since 2016. The United States has transformed about 15 million square feet of big-box retail space into industrial space⁷⁷. So internet encouraged holistic changes in both the uses for which buildings are required and how they are constructed. It will take ingenuity and innovation at a time when there is an unprecedented demand to recycle so many different building types.

74. OpenHeritage. Mapping of Current Heritage Re-use policies and regulations in Europe: Complex Policy Overview of Adaptive Heritage Re-Use. 2019. Report available at: openheritage.eu

75. Lanz, F. and Pendlebury, J. Adaptive reuse: a critical review. 2022.

76. Foster, G. Circular economy strategies for adaptive reuse of cultural heritage buildings for reducing environmental impacts. 2020. p. 152.

77. Dickinson, D. Adaptive Reuse is the Architectural challenge of the future. 2022. Article available at: commonedge.org

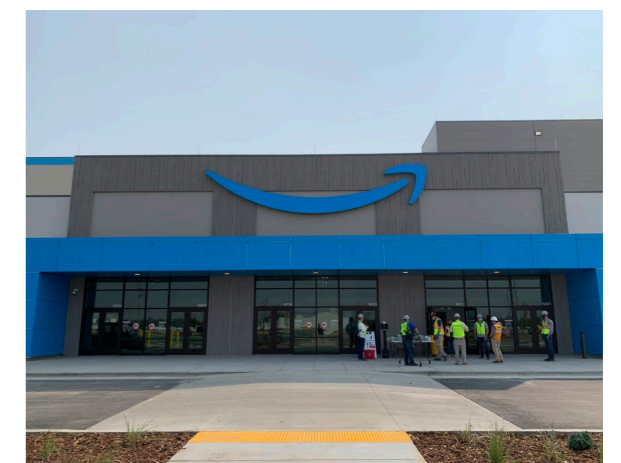


Figure 49: Akron's abandoned Rolling Acres Mall, that has been converted into an Amazon fulfillment center.



Figure 50: Buckminster Fuller, New York Pneumatic Dome, 1962
 R. Buckminster Fuller's suggestion to cover midtown Manhattan with a huge geodesic dome. The dome's main functions were to control the weather and lower air pollution.

Additionally, due to technological advancements and shifting consumer habits, there have been significant changes in sector composition in the world economy. According to an MIT study, rent for smart buildings is 37% higher than for non-smart buildings. According to the European Commission, intelligent buildings can attract a lease value increase of 11.8% and a sales value increase of 5% to 35%. Numerous studies have been mentioned in research by Dr. Alexander Reichardt of the EBS Business School in Wiesbaden that supports higher rentals and higher tenant satisfaction in structures that have earned energy efficiency and sustainability certifications. Therefore, another factor to consider is if the building offers the chance to adapt the systems into smarter and more sustainable ones.

In parallel to these social issues, more people are becoming conscious of environmental issues, and demolishing historical structures is now considered wasteful. As the built environment is a major source of greenhouse gas(GGE), and building construction and operation are directly or

indirectly responsible for 45% of carbon dioxide emissions, more and more people see a chance to evolve the buildings through adaptive reuse⁷⁸. Adaptive reuse is a sustainable approach that uses less energy, resources, and emissions, increases the demand for well-maintained existing structures, revitalizes neighborhoods, and even to carbon-zero plans in developed countries. As a result, adaptive reuse has been recently deeply investigated as a sustainable design practice and emerged notion of "green adaptive reuse." Through the application of green design, there is a significant chance to expand the sustainable practice of adaptive reuse. The field of green adaptive reuse is emerging as more professionals combine sustainable design with the adaptive reuse of historic structures. This combination makes sense because adaptive reuse is more sustainable than greenfield buildings since the infrastructure and resources are already in place. In the international conference on sustainable buildings and risk management that was conducted in China in 2010,

78. UNEP Buildings and Climate change: Summary for decision-makers. UNEP publications. 2009.



Figure 51: Temporary adaptation of Wuhan sport center in Wuhan to hospital. 2020

The green adaptation of heritage buildings was brought up in one of the recommended studies as a viable technique to increase the age of heritage buildings and lessen their carbon imprint on the surrounding environment⁷³. Similar to the LEED "Leadership for Energy and Environment Design" system, which is made up of economic, physical, technological, social, legal, and political categories, a new design and evaluation tool called AdapSTAR was developed in 2011. It contributed to the integrated criteria of the green design of heritage buildings⁷⁹.

Another global issue that influenced adaptive reuse practice was COVID-19. The pandemic has sped up certain developments, like the move away from traditional employment to working from home, while creating others, such as the collapse of the hospitality sector. As a result, there are many older homes that are "distressed" on the market, and landlords who might typically explore building new face uncertainty. During the pandemic, sports arenas have been repurposed as food banks, hospitals, and voting centers, and retail stores have been converted into distribution hubs. Hubs have been

converted into temporary hospitals and student accommodations. COVID-19 has also demonstrated that multiple-use structures are better for the community and environment. However, due to the complexity of historic reuse, creative strategies are needed to complement official policy. Such as a shift from conventional planning models to a strategic, long-term model is required, one that would allow for unforeseen developments like temporary/flexible use and greater participation of non-institutional and non-investor initiatives in the creation of a place.



Figure 52: A temporary shelter in a Las Vegas parking lot, with designated areas for social isolation to try contain the coronavirus's spread. 2020

79. Langston, C.A. Green adaptive reuse: Issues and strategies for the built environment. In Modeling Risk Management in Sustainable Construction. 2010. p. 199-209.

3.4 Case studies of adaptive reuse

Great Court at the British Museum



 **Location:** London/UK
  **Architects:** Fosters+ Partners
  **Completion:** 2000
  **Area:** 19.000m²

Since the completion of the Round Reading Room in the center of the British Museum during the 19th century, the collection of books has steadily grown. However, due to the department's lack of public access, it gradually faded from the public's awareness and was forgotten over time. This prompted a redesign of the Great Court, with the objective of not only revealing the hidden spaces but also creating new areas for public engagement. Competition winner Sir Norman Foster's team expertly blended modern innovation with the museum's rich historical context. Their goal was to preserve the character and integrity of the museum's historic buildings while

transforming the once-courtyard into a vast and transformative area. In other words, they aimed to seamlessly integrate the old and the new so that visitors may enjoy a harmonic union of the two. The eye-catching glass ceiling, supported by elegant steelwork, floods the court with natural light, giving the museum's treasures an ethereal radiance. The Great Court also functions as a social center, offering various services like cafes, stores, and learning facilities. Within the confines of the museum, this architectural concept fosters engagement, conversation, and a thriving sense of community.

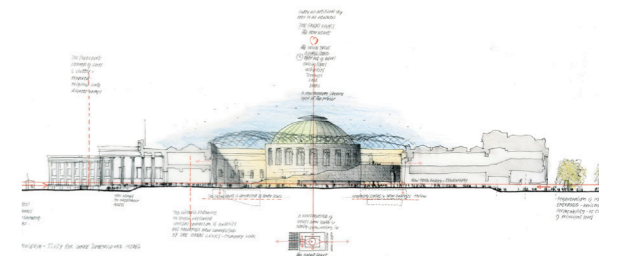
Adaptive reuse:

Primary use:
Library department/
Garden

Secondary use:
Public court

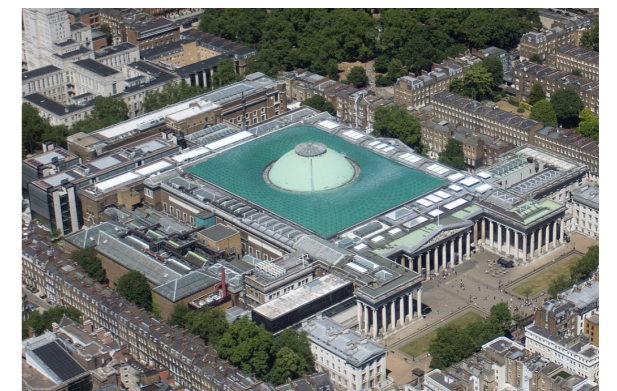
1. Preservation building identity/avoiding falsification.

Norman Foster was absolutely against any kind of falsification of the classical style in the court. Therefore he adopted absolutely contemporary additions and renovation. The restoration of 2 walls behind the library with new materials permits you to perceive which part is traditional and which is new.

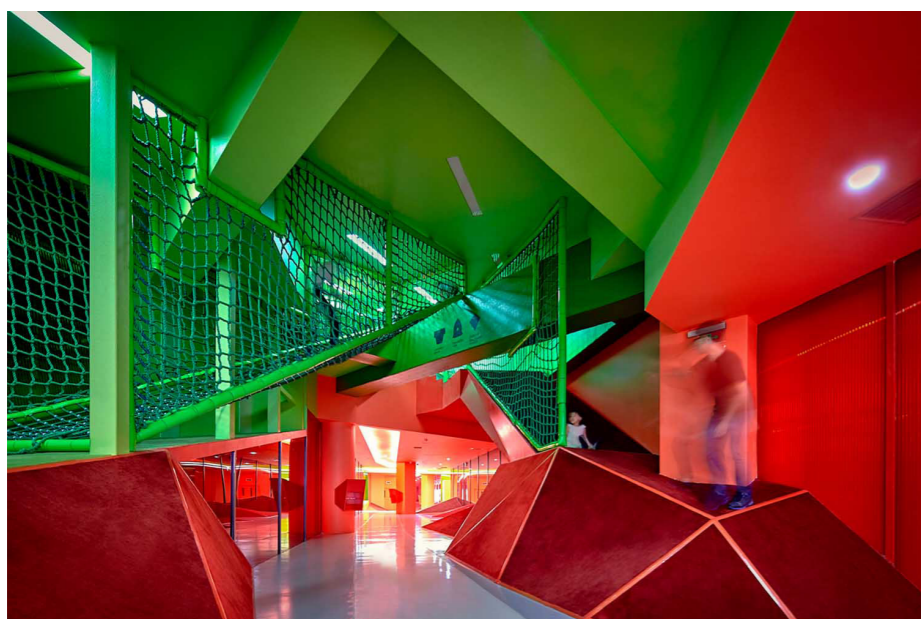


2. Triggering active communities.

The cylindrical library of the British Museum became facilities for the public with the addition of a bookshop, café, and research area. These new additional public places make the court more visited by people to spend their time resting and for studies.



Soyoo joyful growth center



 **Location:** Zhengzhou/China
 **Architects:** Cross boundaries
 **Completion:** 2015
 **Area:** 28.200m²

Despite its initial intention to become the new financial center of Zhengzhou city, Zhengdong's new area unfortunately transformed into one of the infamous "ghost districts" within the region. As a result, the building constructed as a business center remained unutilized, devoid of any occupants or purpose. Recognizing the need for a transformative approach, the committee set forth a new vision to repurpose the building as an institutional facility that would significantly impact Chinese education. Therefore, Soyoo Joyful Growth Center was founded to foster children's holistic development in a nurturing and enriching environment.

Soyoo Joyful Growth Center was carefully designed by the Crossboundaries architects. Crossboundaries have thoughtfully designed a setting that encourages children to explore and engage in social interaction. Flexibility within the design ensures that the area can adapt to the programs and activities of the center's changing needs. To create a welcoming, bright, and conducive space for learning, the architects also prioritized natural light and ventilation. In addition to creating a physical location, Crossboundaries, and Soyoo's partnership has spurred a beneficial cultural shift in early childhood education.

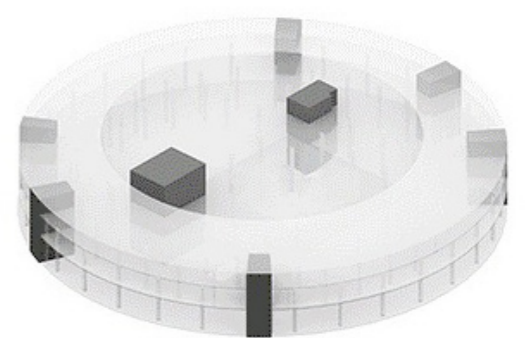
Adaptive reuse:

Primare use:
Business center

Secondary use:
Kindergarten/Multifunctional space

1.Revitalization of the gost district.

At the committee's request, Crossboundaries provided a program based on role-playing, thanks to which kids could choose to learn fields they were interested in. This approach led to the increase of community in the area, which assisted in the revitalization of the ghost district.



2. Creation of flexible spaces.

Even though the interior consists of many different spaces for music, art, reading, dance, geography, etc., the interior has an open structure, i.e., few bounded rooms and more open space, which permits to utilize of the space for other functions, in case of repurposing of the space in the future.



E31-Timber Adaptive reuse theater/ Mercury store



Location: Brooklyn/USA **Architects:** CO Adaptive Architecture **Completion:** 2021 **Area:** 1180m²

Nestled within Brooklyn’s Gowanus Canal district, the site of Project E31 was historically occupied by a metal foundry and served as a hub for heavy industry. The Gowanus neighborhood, renowned for its industrial roots, has undergone a remarkable transformation, evolving into a vibrant area with denser residential, commercial, and primarily cultural sites. The client’s vision for the building was to craft an open and luminous space that honored the authentic character of the existing structure. In response to it, architects aimed to breathe new life into the timber theater and repurpose it as a flexible space that can respond to the changing needs of its environment. The

idea behind this endeavor was to develop a location that effortlessly combined art and business, providing an unmatched experience to tourists and locals. To add a commercial element to the space, the building was redesigned to simultaneously contain a theater and a Mercury store while retaining the inherent charm and character of the original construction.

Adaptive reuse:

Primare use:
Metal foundry

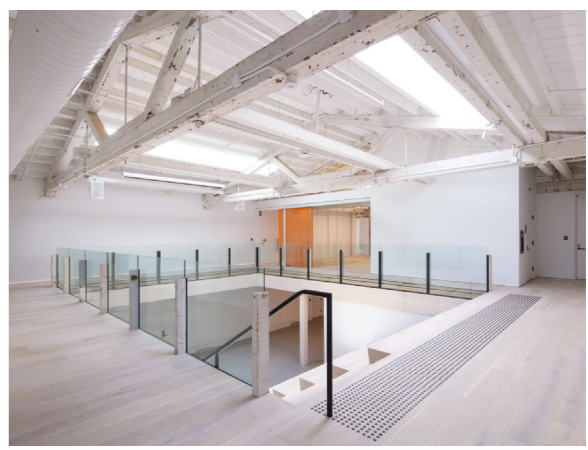
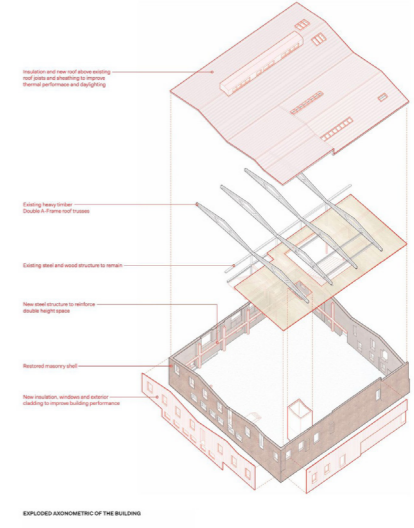
Secondary use:
Theater for freelance artists

1.Sustainable approach to adaptive reuse.

Besides avoiding demolition waste, by giving new life to old buildings, the architect minimized the use of new materials, instead repurposing removed timbers and wood as the base for architectural features. In architectural insertions, low-carbon alternatives were also applied to standard construction practices.

2. Creation of multi-functional spaces.

The Mercury store is not only a place for theater artists, but also the building provides residences, studios, and co-working places.



Gallerie di Palazzo Rosso



 **Location:** Genova/Italy
  **Architects:** Franco Albini
  **Completion:** 1961
  **Area:** 3000 m²

Palazzo Rosso, situated on the prestigious Strada Nuova, holds a significant place in Genoa's history as the street that epitomized the nobility of the city in the 16th century. Once owned by two noble families, the palace remained in their possession until the late 19th century, after which it became the property of the municipality. Despite escaping major damage during World War II, the municipality made a pivotal decision to transform the palace into a museum, ensuring its preservation for future generations to appreciate. When Franco Albini was charged with repurposing Palazzo Rosso, he accepted the challenge with his customary attention to historical context and a vision for

the peaceful coexistence of the old and the modern. He worked carefully to maintain the old building's original features and distinctive character while attempting to accentuate and highlight its architectural beauty. At Palazzo Rosso, Albini's thoughtful approach to adaptive reuse produced a museum that served as both a repository for art and historical artifacts and a place where guests could feel a strong connection to Genoa's architectural past. Palazzo Rosso was able to embrace its twin identity as a cultural destination and a symbol of the continuing legacy of the city because of the excellent integration of modern elements within the ancient framework.

Adaptive reuse:

Primary use:
Library department/
Garden

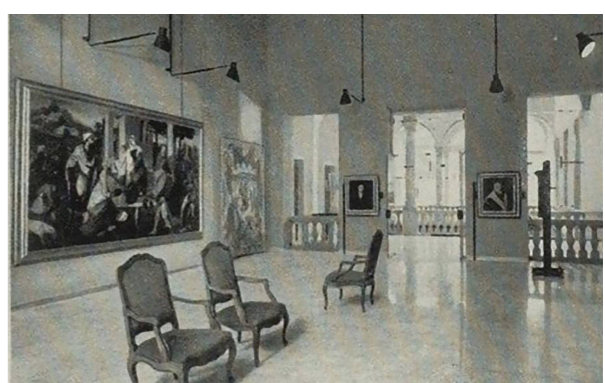
Secondary use:
Public court

1. Adaptation and preservation of heritage building identity, damaged by war.

Unlike its counterpart Palazzo Bianco, Palazzo Rosso was spared damage, protecting its frescoes and stucco. This provided an exceptional opportunity for Franco Albini to preserve the historical identity of the palazzo. Albini ensured the palazzo's unique character and architectural qualities were preserved by incorporating contemporary elements with care and control. This strategy allows guests to enjoy the well-chosen art collection while immersing themselves in the ancient space's original ambiance.

2. Harmonious blend of old and new.

The old and the new coexisted peacefully thanks to Albini's minimalist design aesthetic, which created a seamless fusion of traditional components and modern additions. Modern circulation paths, display systems, and lighting were carefully incorporated into the palazzo's framework to improve usefulness without detracting from the structure's natural beauty. He also created inventive uses of materials and spatial integrations to maintain his minimal approach and the palazzo's identity.





Contextual and regional description

4.1 Karabakh area

4.1.1 Historical background of the region

4.1.2 Urbicide in Karabakh.

4.2 Cultural identity of Shusha and its community

4.2.1 Architecture of the city

4.2.2 Existing land use

4.3 Post-war recovery. Shusha rehabilitation plan



4.1 Kharabakh area

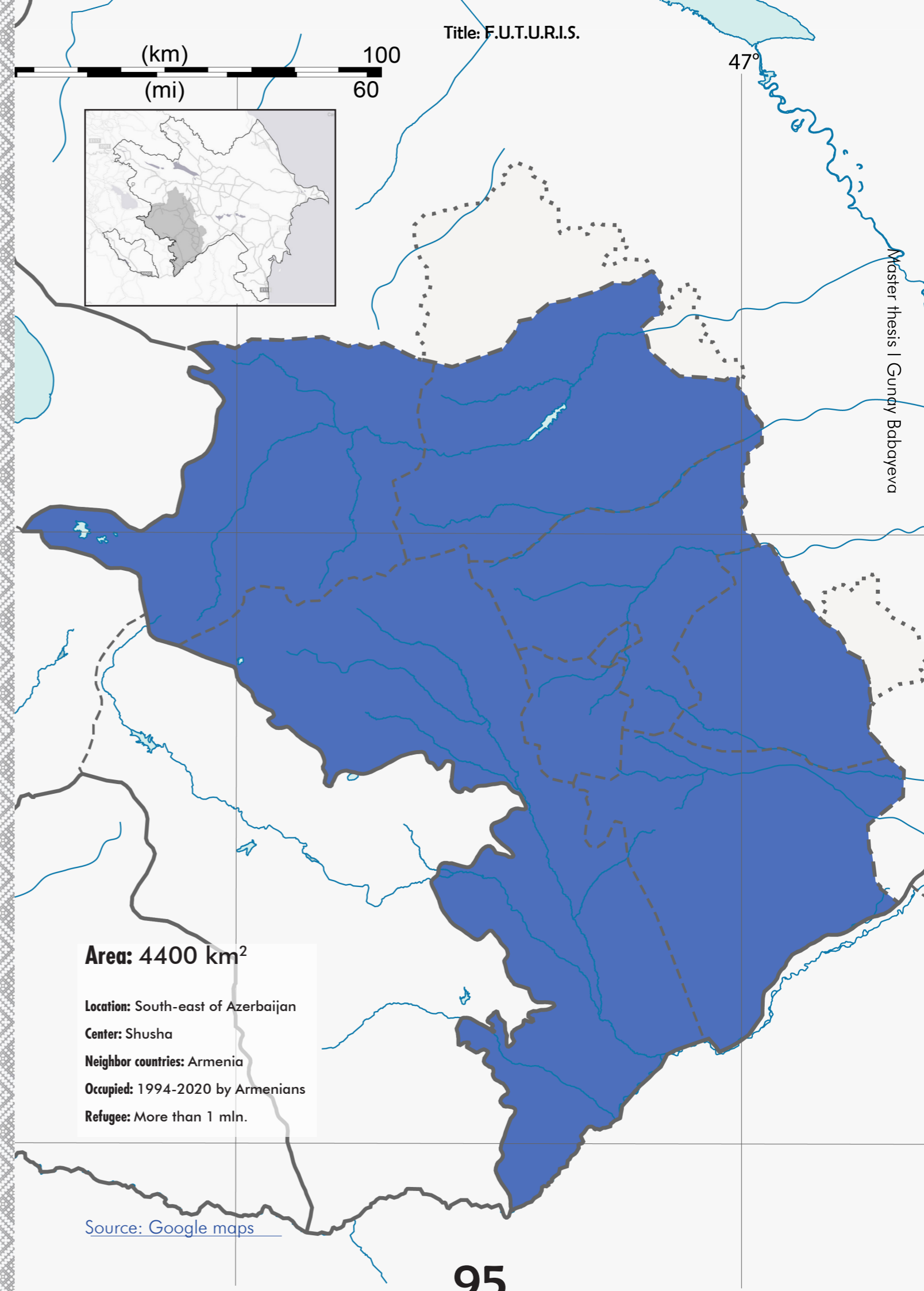
One of the Azerbaijan regions, Karabakh is considered one of the most ancient land not only in Azerbaijan but in the world in general. "Karabakh" is a combination of the Turkish-Azerbaijani words "black" and "garden" (the word "black" is used in Turkic languages, including Azerbaijani, in addition to expressing color, it also means "big," "thick," "dense")⁸⁰. This word was first used in the 7th century and became widespread in the XII century. Known as the cradle of Azerbaijan poetry and music, Karabakh is the homeland of many prominent Azerbaijani scientists, writers and poets, artists, and musicians. Karabakh is located in the western part of

the country, on the border with Armenia and Iran. In 1923, the mountainous part of Karabakh was granted autonomy, and Nagorno-Karabakh Autonomous Region (NKAO) was established on the territory of Azerbaijan under Soviet rule⁸¹. The area covered 4.400 km² and consisted of districts Shusha, Askeran, Hadrut, Mardakert, and Martuni and the city of Khankendi⁸².

80. VirtualKarabakh. Karabakh-Azerbaijan. 2020. Available at: virtualkarabakh.az/en/post-item/2/25/qarabag-azerbaycan.html

81. Karabakh Center. Nagorno-Karabakh in Administrative-territorial structure of Azerbaijan. Available at: story.karabakh.center/en/nagorno-karabakh-in-administrative-territorial-structure-of-azerbaijan

82. Zeyvalieva, T. History of Nagorno-Karabakh. 2020. Available at: imbb.az/en/news/841



4.1.1 Historical background of the region

The main changes in the history of Karabakh are the Arab caliphate invasions and, as a result, the fall of the Albanian state. Since that period, different Turkish states in the territory have constantly attempted to unify current Azerbaijani lands under one country. Only in the mid-

18th century

At the beginning of the 18th century, Azerbaijani lands became the territory of the battle between Russia, Iran, and the Ottoman empire.

1736

Azerbaijan broke up into diverse independent khanates in 1736, one of which is the Karabakh khanate

1804-1805

After the Russian-Iranian war that started in 1804, the khan of Karabakh Ibrahim Khan signed Kurakchay treaty with the general of Russian Empire in 1805.

1813

Under the treaties, Gulistan and Turkmenchay that were signed between Russia and Iran, Azerbaijan became part of the Russian Empire.

dle of the 16th-century centralization of lands into a single state was completed.

4.1.2 Urbicide in Karabakh

The Nagorno-Karabakh region has been a source of contention between Armenia and Azerbaijan for centuries, stemming from a complex combination of historical, ethnic, and territorial disputes. From the beginning of 19th century, demographic shifts increased regional tensions as more Armenians migrated to the Nagorno-Karabakh⁸³. In 1988, as the Soviet Union's strength waned, the dispute escalated into open conflict. Under the direction of their respective governments, both sides engaged in extensive military operations. A ceasefire between the two sides was signed in 1994, resulting in the Armenian occupation of Nagorno-Karabakh together with another seven regions of Azerbaijan Lachin, Kalbajar, Aghdam, Fizuli, Jabrayil, Gubadli, and Zangilan. Significant human suffering and cultural damage were caused by the conflict. As a result of conflict's effect, up to a million people, primarily Azerbaijanis, had to leave their homes in the contested region⁸⁴. During the war, 900 settlements, 927 libraries, nine historical places, 22 museums, four art galleries, 40000 museum exhibits, 44 temples, and nine mosques

83. BBC. Nagorno-Karabakh conflict, respond to 8 questions. 2020. Available at: [bbc.com/azeri/azerbaijan-54456742](https://www.bbc.com/azeri/azerbaijan-54456742)

84. Karabakh. Refugees and IDPs in Azerbaijan. Available at: karabakh.org/conflict/refugees-idps/general-info/

were destroyed or damaged, resulting in a significant loss of human heritage⁸⁵. The territorial disputes over Nagorno-Karabakh persisted for decades despite the human and cultural losses, and attempts at peace negotiations were unsuccessful. In September 2020, the tensions exploded once more into a major war of 44 days, known as the second Karabakh war. A Russian-brokered ceasefire agreement brought an end to the conflict in November 2020. As a result, Azerbaijan regained

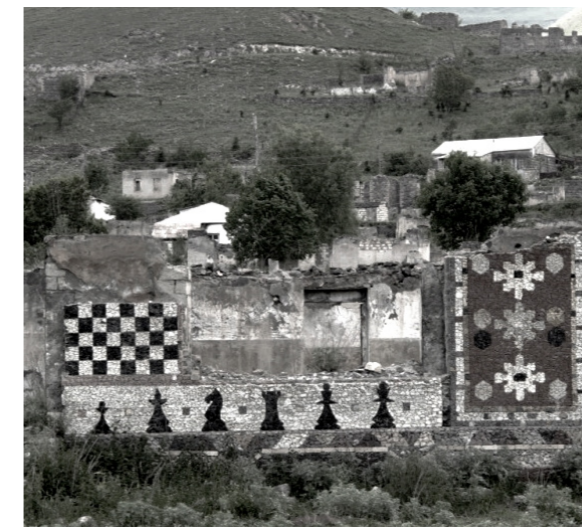


Figure 53: Chess school. Kalbajar



Figure 55: Khojali village

85. Akakishiyeva, R. Karabakh- ancient land of Azerbaijan. 2021. Available at: science.gov.az/az/news/open/18154

86. Gen Prosecutor of AR. The 44-day Patriotic War. Available at: genprosecutor.gov.az

control of five cities, four settlements, and 286 villages, including the important city of Shusha⁸⁶. Since then, extensive rehabilitation and restoration works are currently underway in the region.

The Nagorno-Karabakh conflict is a moving example of how historical, ethnic, and territorial disputes can lead to extended tensions, resulting in significant human suffering and cultural loss.



Figure 54: Akh oglan temple. Lachin



Figure 56: Private house Amirkhanli. Zangilan

4.2 Cultural Identity of Shusha and its community



Historical places and cultural elements of Shusha

“Shusha vocal school occupies

the same position in the history of Azerbaijani music as the Italian vocal school occupies in the history of music”

Shusha city, known as one of the rare and unique pearls of Azerbaijan’s ancient urban culture and history, is located in the mountainous area of Karabakh and is the second largest city of the Nagorno-Karabakh region in the South Caucasus. Due to its strategic geographical position and structure, the city is surrounded on the one hand by rocky walls as a natural defense wall and on the other hand by fortress walls built for timely defense⁸⁷. The city was considered the cultural and political center of the Azerbaijani population living in the region until the middle of the 19th century, as it was home to many Azerbaijani intellectuals - poets, writers, and especially musicians (Azerbaijani ashugs, Azerbaijani mugam singers, gopuz singers).

The castle city’s unique landscape, known worldwide as the “Conservatory of the East” and “Cradle of Music of Azerbaijan,” has allowed local architects to inspire their creative imagination and create exciting buildings that can add color to natural beauty. As a result, the city is rich with 549 ancient buildings (72 of them are house museums), 17 neighborhood springs, 17 mosques, six caravanserais, three tombs,

two madrasas, several churches, and monasteries, two castles, and a fortress⁸⁸. Thanks to its rich natural resources, culture, and strategic location, Shusha was actively involved in the international trade of the 18th and 19th centuries, especially in the silk trade⁸⁹. This leads the necessity to develop a commercial center in city planning. Therefore, the main square of the city is a trade center as well. Three trade streets of Shusha started from there: Rasta Bazar, Ashagi Bazar, and Sheitan Bazar on the Northern, Eastern, and Southern parts of the city relatively⁹⁰. Caravanserais, trade centers, and religious buildings were located on these three streets. Shusha has also been known as the cradle of music since ancient times and has gained fame as an inexhaustible source of folk music talents throughout the Caucasus. Shusha musicians created the history of Azerbaijani music and performed it not only in their native country but also in other Eastern nations.⁹¹ Talented music researcher Firudin Shushinsky stated, “Shusha vocal school occupies the same position in the history of Eastern music as the Italian vocal school occupies in the history of music.”⁹⁰

87. The State Committee on the Religious Associations of the Republic of Azerbaijan. Vandalized monuments of Shusha region. Available at: scwra.gov.az/az/view/objects/11
 88. Supremecourt of Azerbaijan Republic. Shusha district. 2022. Online article available at: supremecourt.gov.az/en/static/view/305
 89. Azerbaijan community of Nagorno-Kharabakh region of Azerbaijan Republic. Shusha is a city of historical, cultural and strategic importance. Available at: karabakh.az/news/613
 90. Azertac. Caravanserais of Shusha fortress. 2021. Available at: azertag.az/xeber/Susa_qalasinin_karvansaralari-1742995
 91. Safarova, Z. Shusha is the temple of Azerbaijani music. 2013. Online article available at: musigi-dunya.az/new/added.asp?action=print&txt=12

Community

During the Khanate and the Soviet period, the majority of the city's population was an ethnic group of Turkish origin who lived in the region between the Great Caucasus and river Aras and owned their language and culture. Most of the Shusha people were descendants of beks and khans (tribal titles). They were very noble and experienced people. It was very common for families to have at least one member in the family who knew to play musical instruments or sing. Another main activity among the population was artisanship, of which particular importance were artistic crafts - carpet weaving and embroidery, jewelry art, and monumental painting, with which artisans reached unusual heights and glorified not only their native city but the whole of Azerbaijan. However, there were born and raised



Figure 57: Trade in Shusha in Medieval period

intellectuals, and these intellectuals played an important role in the development of Azerbaijani culture. There was no street

in ancient Shusha where a person whose name was not recorded in history did not live. There were 95 poets in Shusha in the 19th century, along with 22 musicians, 58 singers, 12 scribes, 19 calligraphers, 16 painters, eight architects, five astronomers, 16 doctors, up to 42 instructors, and others⁹².

4.2.1 Architecture of the city

The uniqueness of the architecture and urban planning of the city is formed by its low-rise buildings built with traditional material "white stone," narrow and curved streets, sloping roofs, and historically developed neighborhoods. If, in other cities of Azerbaijan, the primary construction material was brick, it was more common to utilize granite or white stone in Shusha. The city consisted of 17 neighborhoods, so-called "mehelle," and each had its madrasah, mosque, spring, and bath houses⁹³. The diversity of houses is noteworthy in Shusha's civil architecture in the XVIII-XIX centuries. Among the construction of the traditional developed-city houses or palace-type houses, the development of old Azerbaijan dwelling type, garadam-type (black-roof) houses, were still used in the territory⁹⁴. The rectangular-plan mosques in each neighborhood were covered with white stone. Even though the exterior of mosques interiors were constructed entirely according to religious architecture standards.

92. Supremcourt of Azerbaijan Republic. Shusha district. 2022. Online article available at: su-premecourt.gov.az/en/static/view/305

93. Azerbaijan National Commission for UNESCO. Shusha historical and architectural reserve. 2001. Available at: whc.unesco.org/en/tentativelists/1574/

94. Shusha today. Armenian vandalism in Shusha. Available at: shusha.today/armenianvandalism/world-importance/shusha-state-historical-architectural-reserve/



Figure 58: Architecture of the buildings in Shusha

Source: Karabakh.center

4.2.2 Existing land use

N	Name	Total(2020)	In decent conditions	Partially ruined	New
1.	Cultural buildings	17	3	12	2
2.	Educational buildings	12	5	6	1
3.	Religious buildings	9(2)*	7(2)*	2	-
4.	Hospitality buildings	6	5	-	1
5.	Entertainment buildings	3	3	-	-
6.	Commercial buildings	12	-	-	12
7.	Office/Governal buildings	2	-	2	2
8.	Medical Centers	1	-	1	-

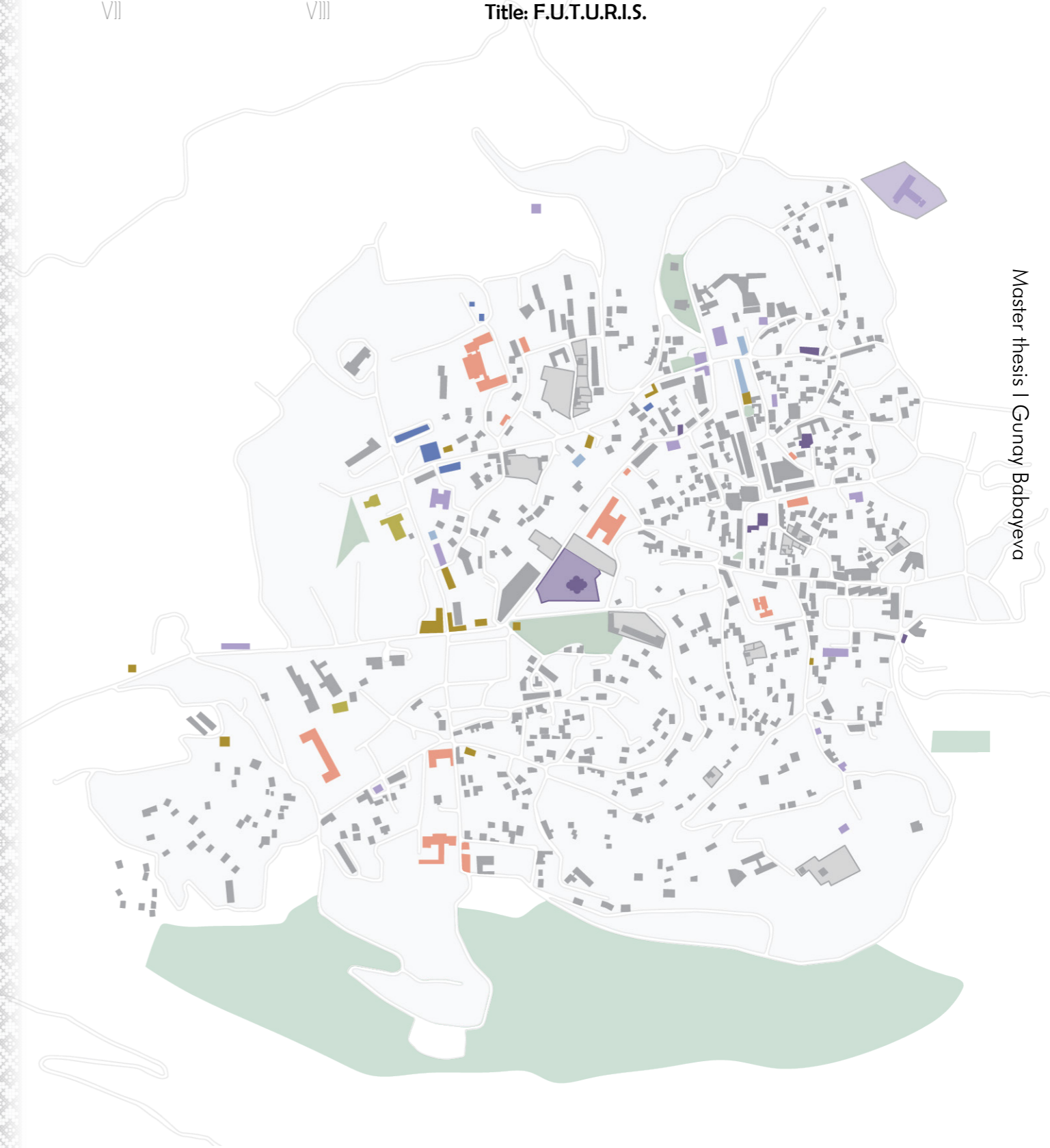
Existing services/buildings in the city









* (2) shows number of Churches in the city

During the conflict and occupation period for 28 years, 600 historical and architectural monuments, 22 secondary schools, 31 libraries, two cinemas, eight museums, and eight cultural centers were reported as damaged and destroyed⁹⁵. On map 1, it can be seen the general plan of the city after liberation, the position of public and private buildings according to different sectors: residential, cultural, educational, religious, hospitality, entertainment, commercial, and office/governed buildings. In the current city situation, most private houses are almost ruined (around 95%), and some residential buildings are unsuitable for living, expired, or in a state of disrepair. As illustrated in the table, from 17 mosques in the city before the occupation, only five are preserved, 2 of which are almost ruined; there are also two churches held in the city. Even though most buildings

are cultural in the whole town, only three house museums are in good condition, two new museums are being constructed after liberation, and the other 12 museums/museums are partially destroyed. The same can be stated about educational buildings; only five buildings out of 12 are in good condition, one is newly constructed, other six are partially ruined. The lowest numbers can be noticed in the entertainment sectors, with only 3 cinema areas in the city and governed buildings, which are only 2 in the territory. However, one of the main living sectors, medical centers, is totally destroyed. Generally, even though there were constructed new buildings in different sectors after liberation, the city remains a ghost city today, which does not possess all the necessary conditions for citizens to return to their hometowns.

95. Embassy of AR in Iran. 24th anniversary of the occupation of Shusha. 2016. Online article available at: tehran.mfa.gov.az/en/news/3085/24th-anniversary-of-occupation-of-shusha

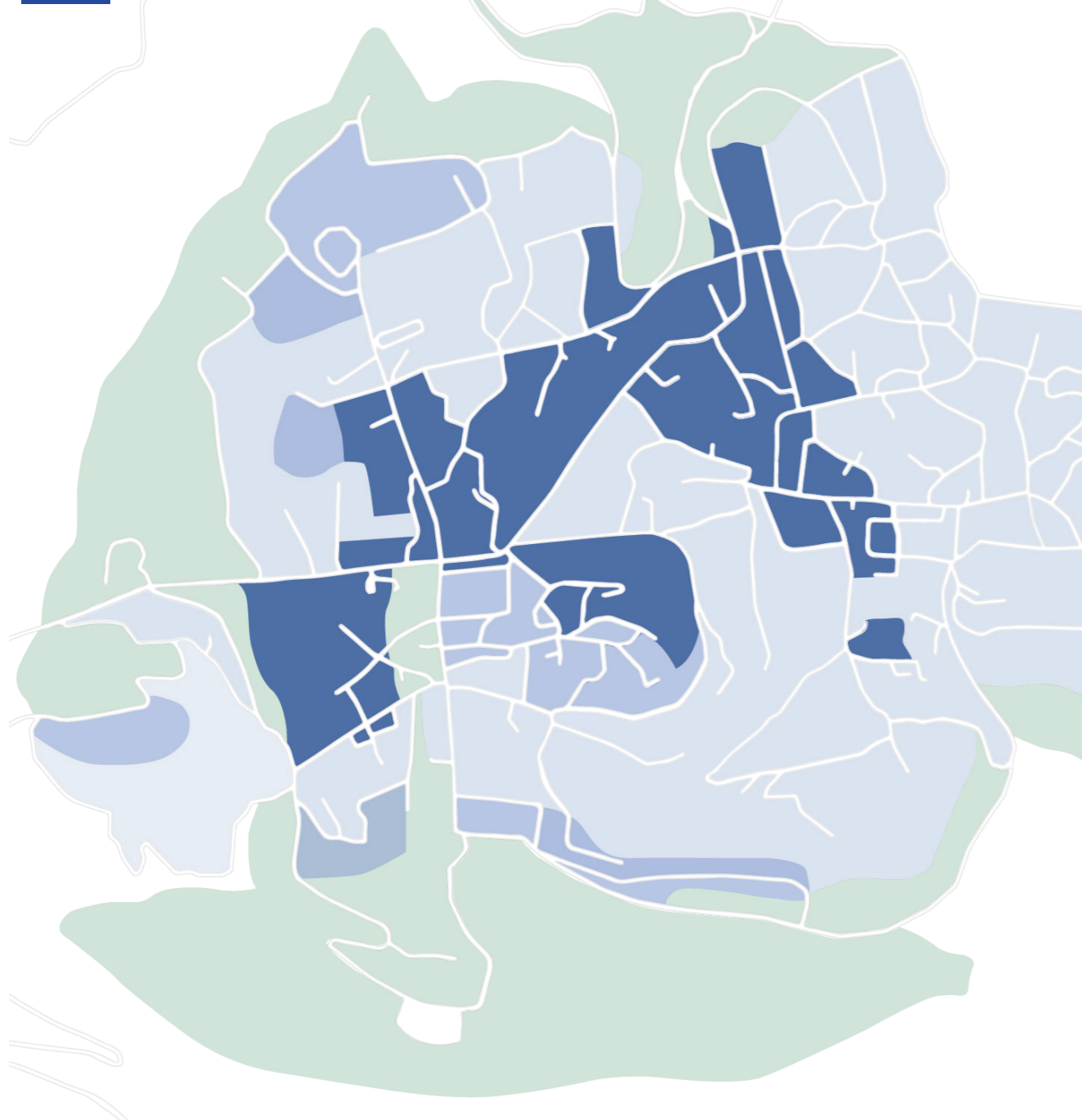


 Residential buildings/ruined buildings	 Entertainment buildings	 Cultural buildings
 Office/governal buildings	 Commercial buildings	 Religious buildings
 Hospitality buildings	 Educational buildings	

Existing land map 1

Source: Karabakh.center, wikimapia.org

4.3 Post war recovery. Shusha rehabilitation plan



- 1-2 storey Residential buildings
- Dense multi-functional buildings
- 4-5 storey Residential buildings
- Landscape

Zoning plan of Shusha city

Source: BBC news Azerbaijan



- Residential buildings
- Entertainment buildings
- Cultural buildings
- Office/governmental buildings
- Commercial buildings
- Commercial buildings
- Hospitality buildings
- Educational buildings

Service plan

Source:BBC news Azerbaijan

After the liberation of occupied territories in the Second Karabakh War, the government of Azerbaijan has shifted attention to the future of the Karabakh area, particularly on the revitalization and restoration of Shusha city. As a result, Azerbaijan President Ilham Aliyev has announced 2022 as the “Year of Shusha.” One of the primary objectives of the government during the “Year of Shusha” is the restoration of Shusha’s status as the cultural capital of Azerbaijan, the preservation of the city’s prosperous historical-architectural heritage, and the revitalization of the community.

City-wide historical restoration, reconstruction, and construction works have already started in Shusha. In particular, the restoration of mosques, home museums of aristocratic people, and historical monuments of Shusha, which have been destroyed. In the general plan, the architectural style of Shusha is also envisaged by dividing the city into neighborhoods with 25 buildings in each. It is planned that 3, 4, and 5-story buildings will also be built in Shusha’s architectural style in the first neighborhood¹. While preparing the general plan, the construction of green corridors was also considered to preserve and develop greenery and landscape following the relief of the city.

Smart city concept

According to the presidential decree, the Karabakh area will be transformed into a “greener energy” zone after rebuilding power transmission lines and generating capacities in the country’s liberated territories⁹⁶. Within the 2020-2022 National Action Plan framework, the projection of a “smart village” in the liberated territories is also presented. The implementation of the project mainly covers five sectors: the housing sector, production sector, social services, smart agriculture, and alternative energy⁹⁶.

According to presidential decree, Karabakh area will be transformed into a “greenery zone”

96. Lmahamad, A. Azerbaijan’s focus to future: Restoration of liberated lands. Article available at: azeritimes.com



Figure 59: Architecture proposal for Shusha city

Site and user analysis

5.1 Caravanserais in Shusha

5.2 2-storey Caravanserais in Shusha

5.2.1 Architecture and Current conditions

5.3 User requirements and expectations

5.3.1 Interview methodology

5.3.2 Interview

5.3.2.1 Highlights

5.3.2.2 Interview considerations

5.3.3 General outcomes



5.1 Caravanserais in Shusha

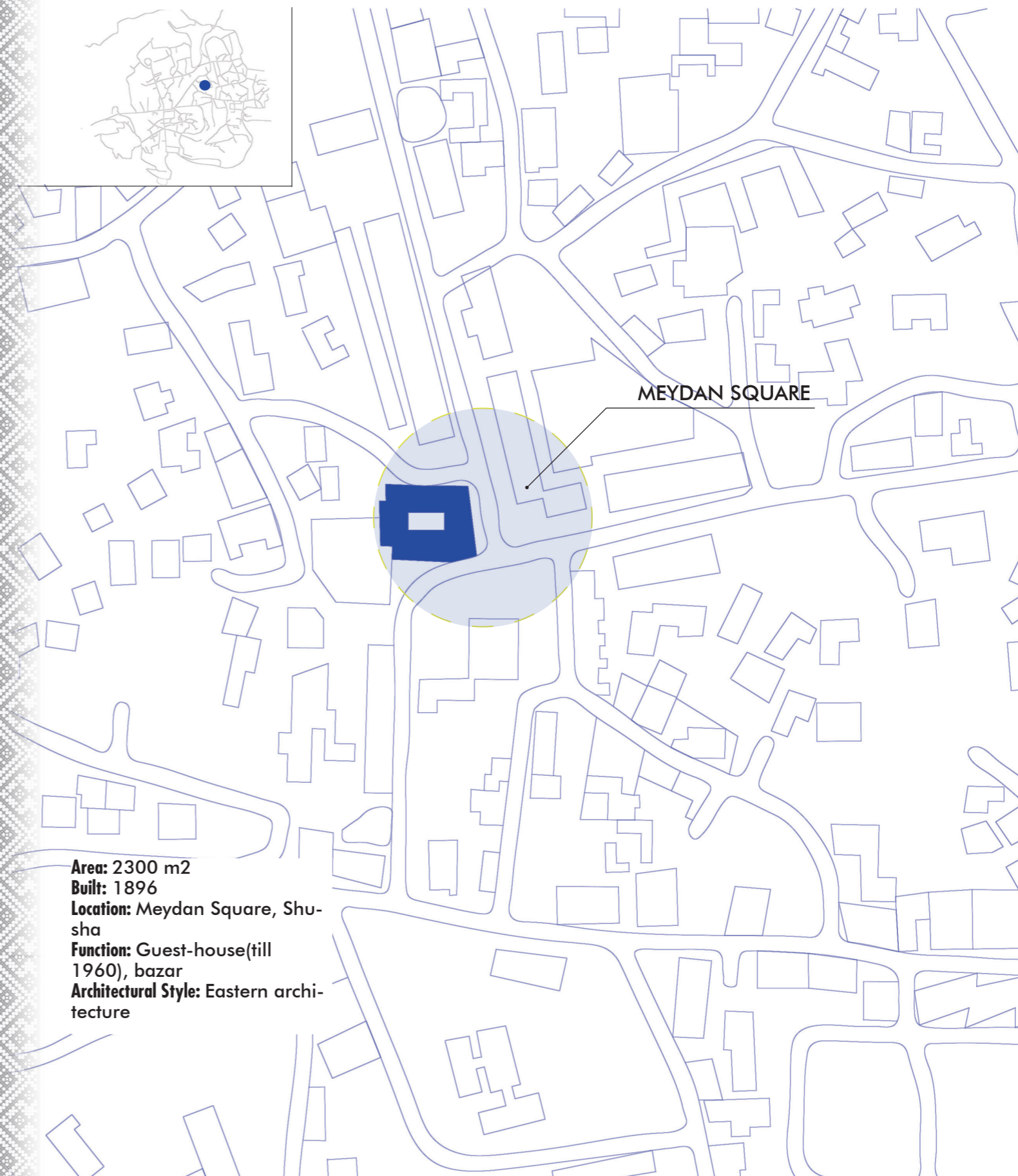
Caravanserais have been built in Azerbaijan's commercial cities, which were located on caravan routes along the Great Silk Road. Caravanserais are intended as caravan stops on the road from one city to another for commercial purposes⁹⁷. It includes hotel-type rest rooms, stables for horses and livestock, warehouses for storing commercial goods, various shops, canteens, etc. Due to their structure, caravanserais were considered public buildings with all conditions, which allowed them to accommodate guests in many small rooms that were not connected, to keep them comfortable and to store their goods. Merchants, caravan owners, and travelers from the same region who spoke the same language tried to stay in the same caravanserai for security reasons. Caravanserais occupied a special place

among Shusha's architectural monuments. This is reported in the book "Shusha - Panahabad" by historian, scientist, and academician Yagub Mahmudov and professor Jamal Mustafayev⁹⁸. It is considered that the construction of the first caravanserai in Shusha coincides with the creation of the first residential neighborhood - the Tabrizli neighborhood⁹⁸. The structure of the caravanserai in Shusha was continued later by noble people and merchants of Shusha city, most of which were located in Shusha's trade streets. There were three main streets for commercial trade in Shusha: Rasta bazaar street, Ashagi bazaar, and Sheitan bazaar street. By the end of the 19th century, there were already ten caravanserais operating in Shusha.

97. Azerbaijan. The ancient caravanserais of Azerbaijan. updated 2021. Available at: azerbaijans.com/content_1773_en.html

98. Mammadli, N. Every neighborhood of a city calls history. 2022. Available at: medeniyyet.az/page/news/62049/Her-mehellesi-tarix-cagiran-seher.html

5.2 2-storey Caravanseray in Shusha



Area: 2300 m²
Built: 1896
Location: Meydan Square, Shusha
Function: Guest-house(till 1960), bazar
Architectural Style: Eastern architecture

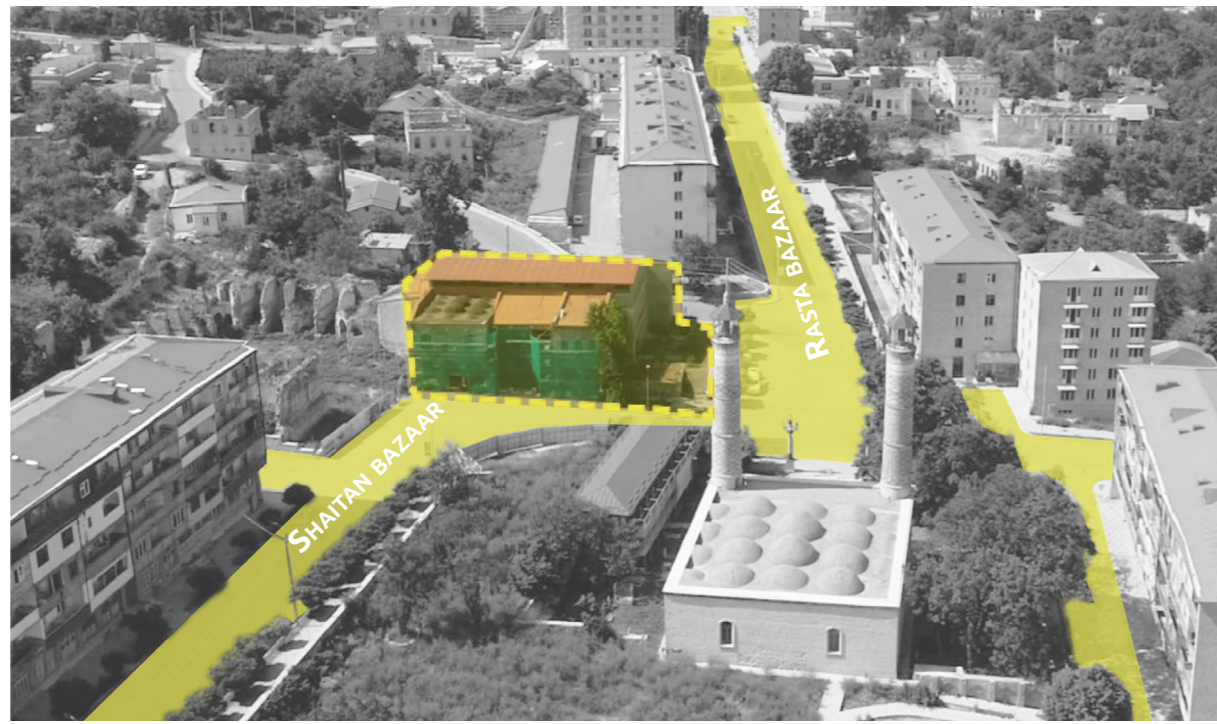
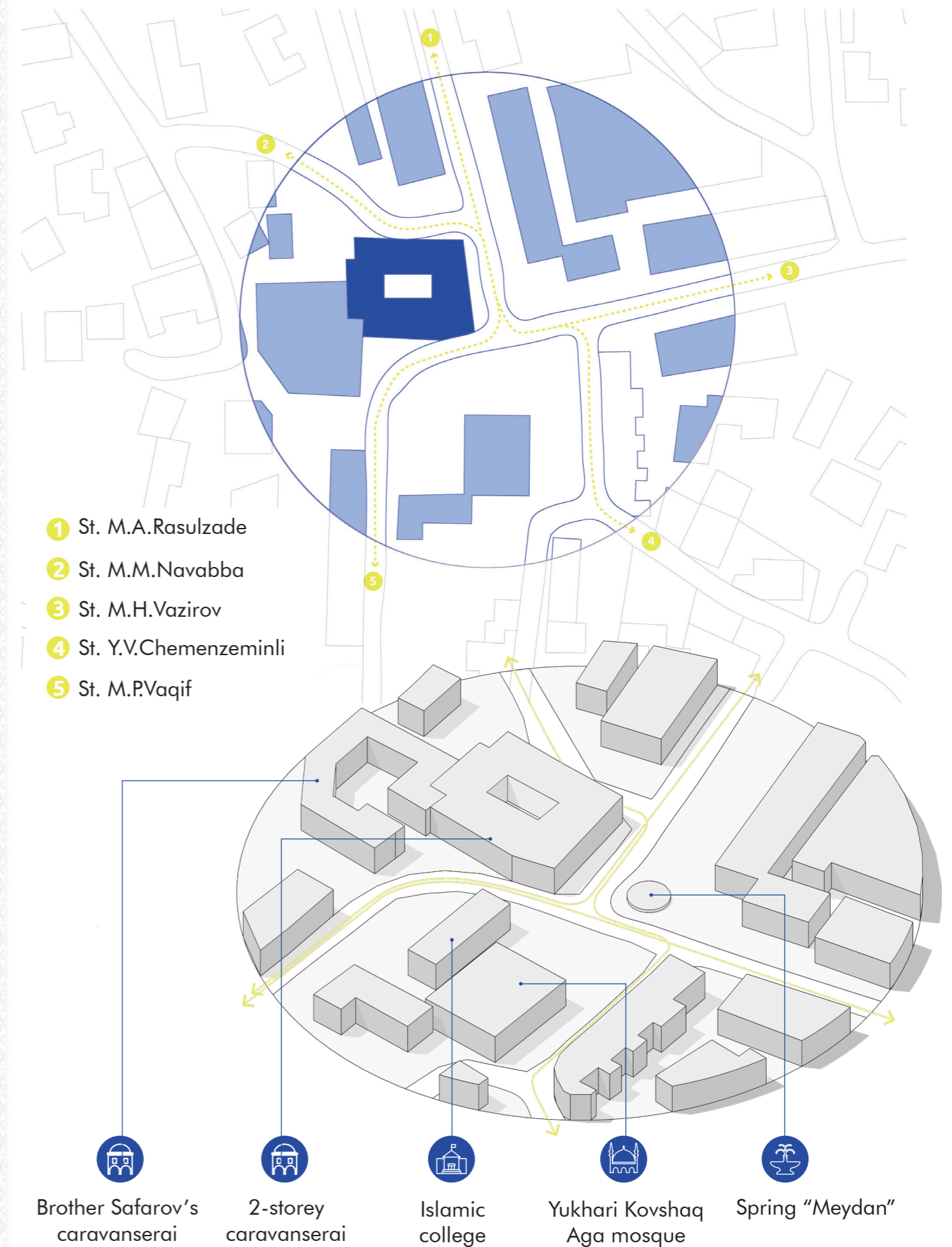


Figure 60: Position of the caravanserai in the city

The caravanserai of Mir Sayyaf glu, built in the southern part of Meydan Square (City Square), was also called a two-story caravanserai⁹⁹. The caravanserai of Mashadi Shukur Mirsayyaf glu was part of the central city square's general complex of architectural structures and took an active and responsible position. The main facade of the caravanserai opens to the northern part of one of the three main shopping streets in old Shusha, Shaitan bazaar Street, which is now called Nizami Street. While the central trade high-

way, "Rasta Bazaar," is completed by a small area oriented to the southeast. The site, which is located on the eastern side of the caravanserai, has a rectangular shape and is elongated along the axis of the highway. The fountain (spring) of the neighborhood "Meydan" spring is also located in this area. As it is shown in Figure A, the "Safarov Brothers" caravanserai adjoins the western wall, which was destroyed during the Azerbaijani-Armenian war.

99. Karana, S. Two-story caravanserai. Available at: map.virtualkarabakh.az/monument.php?ID=106



- 1 St. M.A.Rasulzade
- 2 St. M.M.Navabba
- 3 St. M.H.Vazirov
- 4 St. Y.V.Chemenzemimli
- 5 St. M.P.Vaqif

- Brother Safarov's caravanserai
- 2-storey caravanserai
- Islamic college
- Yukhari Kovshaq Aga mosque
- Spring "Meydan"

Figure A: Services analysis around the site in 1987 by archeologist.



Throughout history, the caravanserai has passed three stages of transformation. During the Russian Empire occupation period, the caravanserai housed several trade offices and about thirty large and small shops, while on the second floor, there were guest rooms for merchants. During the Soviet period, the building was transformed into a bazaar for the local public. During the Armenian occupation, the building continued its function as a bazaar.

I period: 1896-1960

The caravanserai was built in the 80s of the XIX century at the expense of the famous Shusha noble person Mashadi Huseyn Mir Sayyaf oglu. This caravanserai was built on the site of the former Carvansaray of Hadji Amiraslan, which was recorded on the general plan of the city of Shushi in 1855. It is known from Baharli's manuscript "Akhvalati-Karabakh" that Mashadi Huseyn Mirsiab oglu, having bought a caravanserai from Haji Amiraslan's daughter, demolished it and built a new one in the same place, which began to be called after him. Caravanserai constitutes a new stage in the de-

velopment of this type of structure in Azerbaijan. It is an exciting example of both architectural and planning solutions at the turn of the 19th-20th century. There were different shops and workshops in the caravanserai, including hairdressers, shoemakers, tailors, hatters, and others. The second floor of the caravanserai was used as the resting area to host merchants during their travel. The guests of the caravanserai were not only merchants from the cities of the Caucasus but also from Iran, Iraq, Turkey, Arabia, Central Asia, Russia, and other European countries¹⁰⁰.

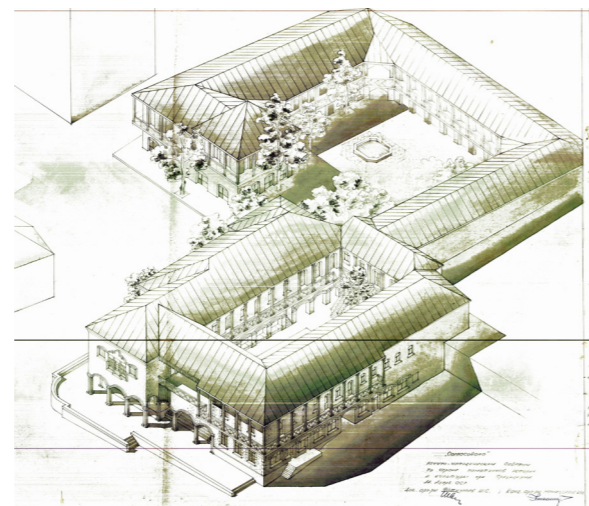


Figure 61: Caravanserai in XIX century

100. Shushinski, F. Shusha.1968. p. 29.

The central court of the former caravanserai

II period 1960-1992 **III period: 1992-2020**

During the Soviet era, the 2-storey caravanserai was turned into a commercial complex and was reconstructed in 1960 to transform into a bazaar (market). The central court of the caravanserai was transformed into a closed area, verandas were adjusted to full walls/ glass dividers, oriental decorations were removed, and traditional materials were replaced by concrete and painted walls. The central court of the former caravanserai was used as a bazaar after the transformation, lighting system of the area was transformed. While the rooms of the bazaar were mainly utilized as storage or for administration. Bazaar played an essential role in the community, as agriculture was not developed in the city during that period due to Shusha's lack of still water. Farmers of close villages were trading their products in the caravanserai with local people.

During the Armenian occupation, the site experience significant damage. The roof and walls on the upper floor were destroyed. Notably, the Armenians also made efforts to repurpose and revitalise the site for the local community's benefit. They recovered the function of the site as a bazaar for local people and rescued the building. Meanwhile, they also attempted to restore the space's initial architecture as before the Soviet period. They rebuilt the inner verandas on the caravanserai and restored the original material of the building in certain areas. Despite this, they ruined the floor of the mosque, creating a void between the two floors.



Figure 62: Restoration of the Caravanserai, by armenians during occupation.



Figure 63: Bazar in 2-storey Caravanserai

5.2.1 Architecture and current conditions

The caravanserai of Mashadi Shukur Mir-sayyaf oglu is two-storied, rectangular in plan, and represents a type of traditional caravanserai but in a more modern interpretation. As can be seen from Figure 62, the plan is well-defined, structurally clear, and very expressive in its decision. Undoubtedly, the construction and planning techniques of the second half of the 19th century positively affected the solution of the architectural and spatial composition of the caravanserai. On the ground floor, there was a vast elongated courtyard (26 x 11 m), around which there were warehouses and about 30 different shops for merchants, and on the second floor, there were 25 living rooms for guests. Usually, guests, merchants, and rarely travelers were renting these rooms¹⁰¹. The bypass united the upper rooms. Communication between the

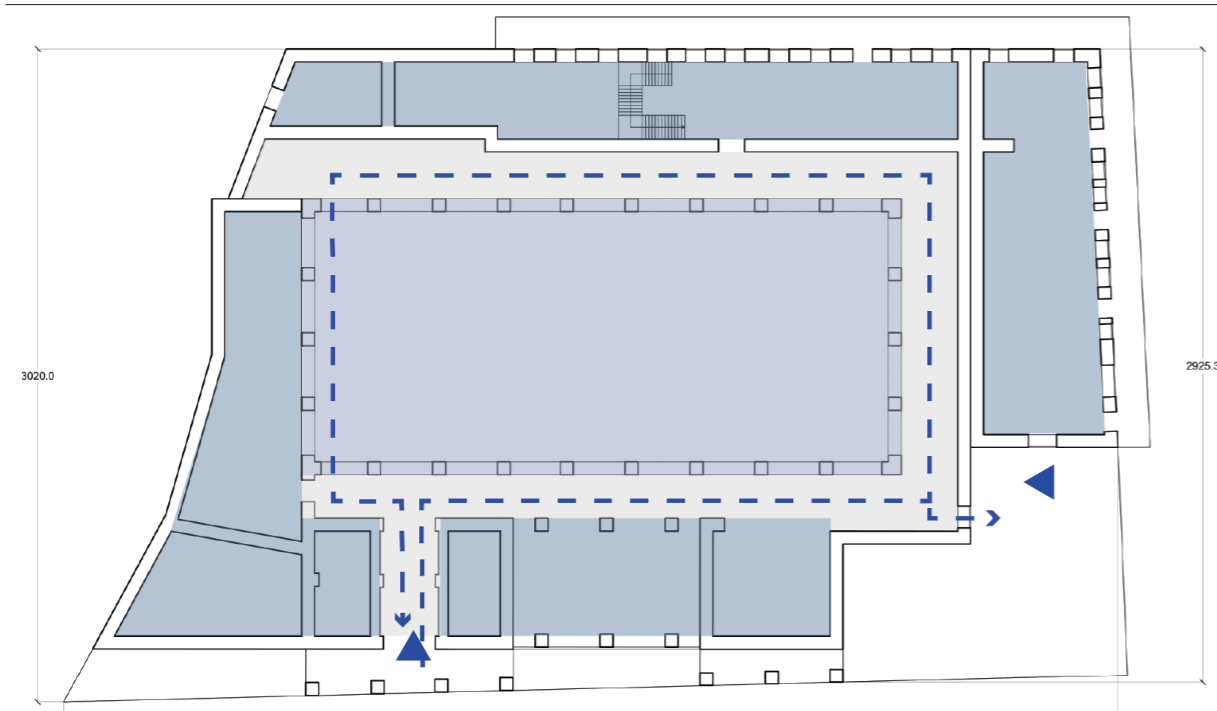
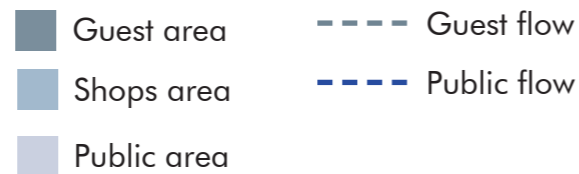


Figure 64: 1st floor plan. 1977

101. Gajar, Ch.Old Shusha. 2007. p. 122.



Figure 65: Photo of the entrance. 1977

floors was carried out through an internal wooden staircase. The first floor of the facade is designed in the form of a stone colonnade, behind which there is an open passage-type gallery. A simple profile of a stone belt passes at the second floor's floor level and the window sill's level. The second corbel passes at the level of the upper quarter of the windows and flows around them, creating a frame for their lintels. The roof is pitched and covered with roofing iron. The main dimensions of the building are 48 x 28 meters.

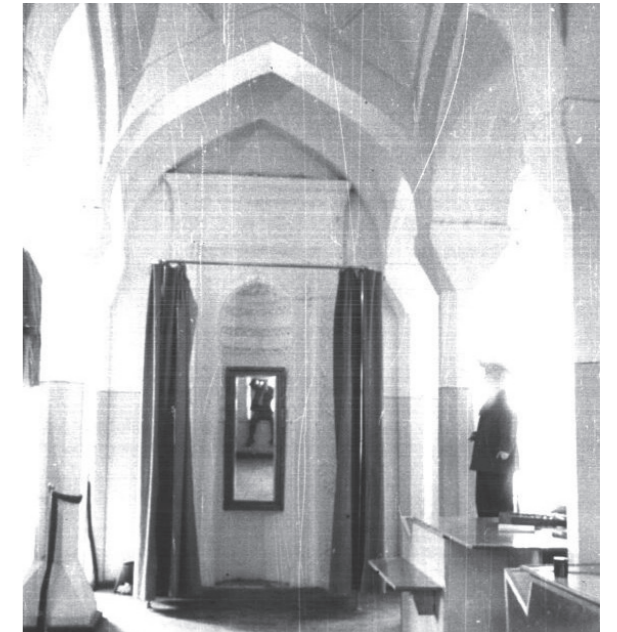


Figure 66: Photo of the sewing room. 1977

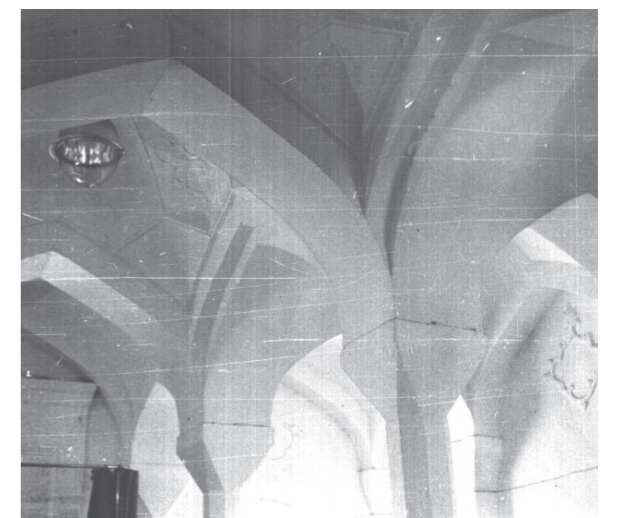


Figure 67: Detail of the interiors



Figure 68: Ceiling of the mosque. 1977

The most interesting and original part of this structure is the placement of a small mosque (8.5 m x 9.5 m) on the second floor of the southwestern wing of the caravanserai. The mosque was built on the principle of mosques, practiced by the famous Karabakh school, headed by the most significant architect of Azerbaijan at the turn of the 19th-20th century, Kerbalai Sefi Khan of Karabakh. Perhaps he built a caravanserai with a mosque. Faceted stone columns, stellate arches, and domes make up a dramatic spatial composition. Three-nave prayer back was covered with an ogival vault resting on octagonal columns. The windows of the mosque overlook the southern facade. At the same time, the mosque is the cultural core of the second floor, where merchants, in addition to prayer, spent their time after trading.

Details

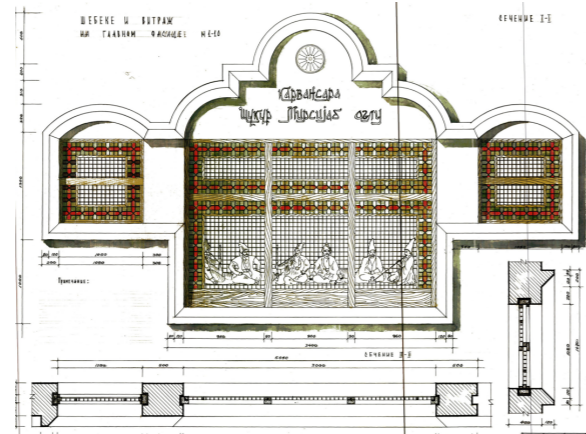


Figure 69: Technical detail of the main facade window

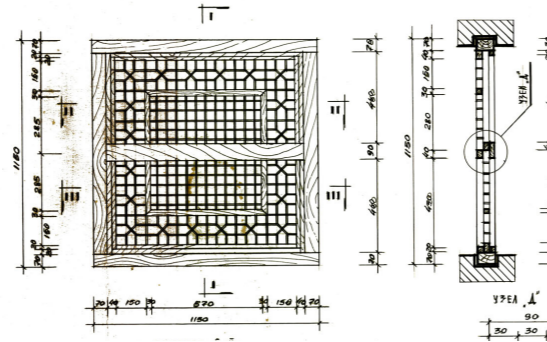


Figure 70: Technical detail of the facade stained glass window

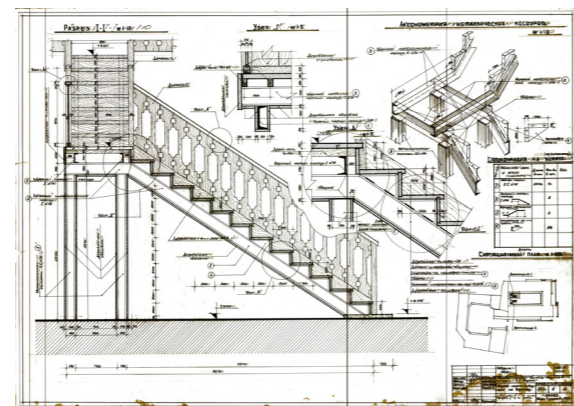
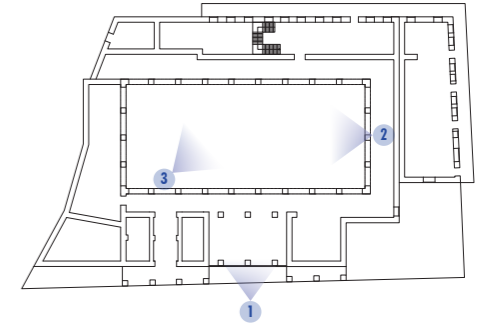


Figure 71: Technical drawing of the inner court stairs



Current conditions



Figure 72: Front view of caravanserai in 2021



Figure 73: Interior view 02

At the moment, there is no exact data on the state of this architectural monument; however, as it can be observed from photographs, almost all window openings and doors are destroyed, and signs of vandalism can be seen on the second floor's walls. The base of the mosque



Figure 74: Interior view 03

on the second floor of the caravanserai was ruined. Instead, there was built new staircase on the right of the secondary entrance. New materials and sections were added to the space, such as concrete walls and metal roof sheets, surrounded by glass openings.

Materials



Figure 75: Exterior view.2020

White stone



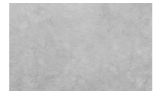
As in other traditional construction of Shusha, also here facade, walls, and interior columns of the space are built with white stone.

Wood



Wood is used on the floor of the second-floor balcony and the windows mullions.

Concrete



The second primary material that has been used is concrete. This material is used during the Soviet era to cover floor pavement and walls.

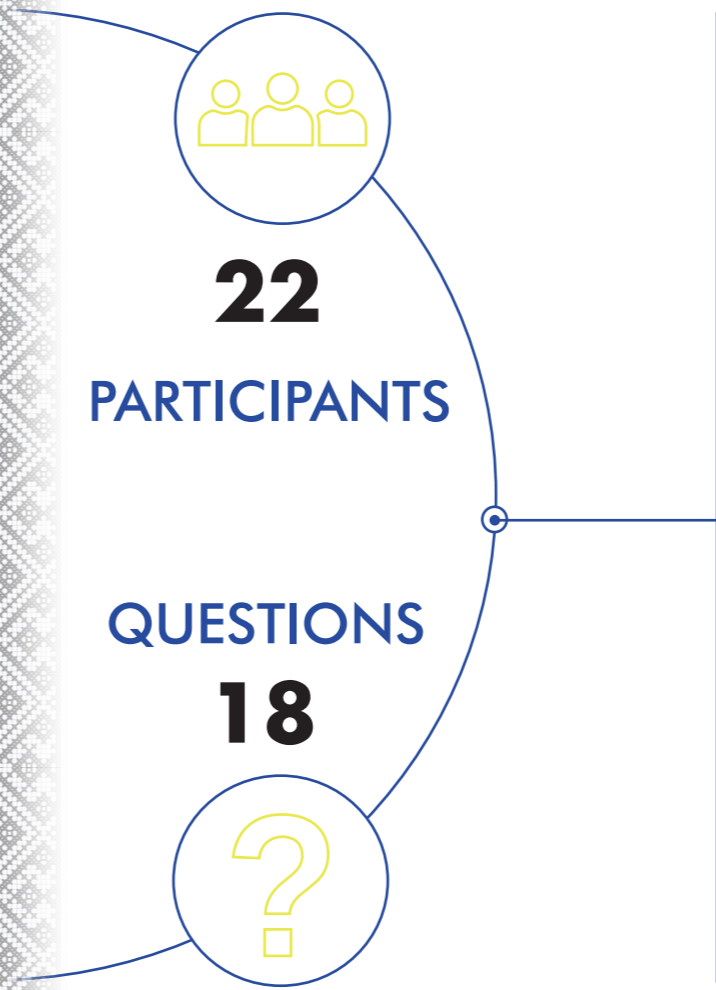
Metal



Metal is mainly used for metal roof sheets and railings on the second floor.

5.3 User expectations and requirements

5.3.1 Interview methodology



Aim

The purpose of the interview was to foster a deeper awareness of community issues and requirements, recreate a connection between the community and the city, and enhance the role of the community in the restoration of the post-war city.

The interview was split into two curriculums: one dedicated to the old generation, who were born and raised in Shusha, and the second to the new generation, whose parents are from Shusha city.

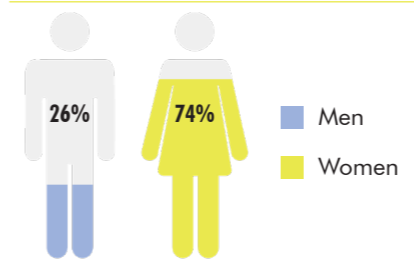
The first group/ old generation described their connection, and memories, with the city and site and discussed its problematic and successful points. While the second group/ new generation shared their vision about the future of Shusha city, their expectations, desires, and needs to return to the city with their parents or relatives.

General info

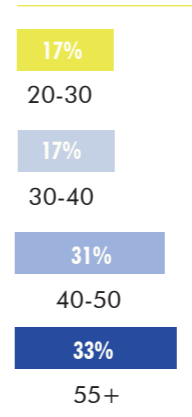
Interview method

8 via video call live

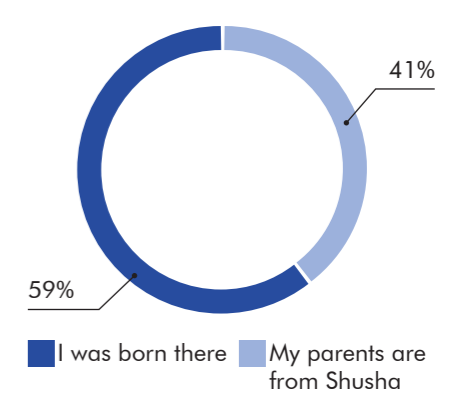
Gender



Age

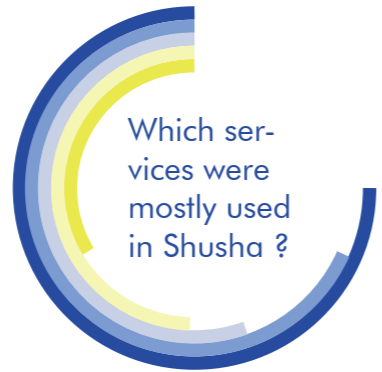
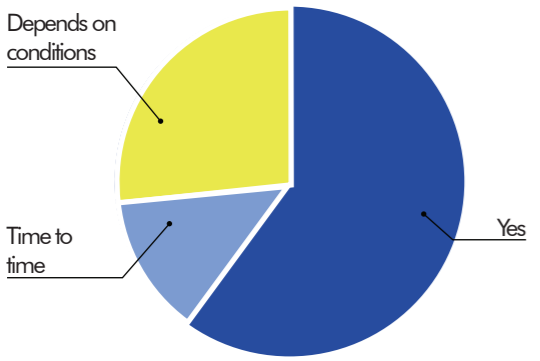


What is your connection with Shusha?



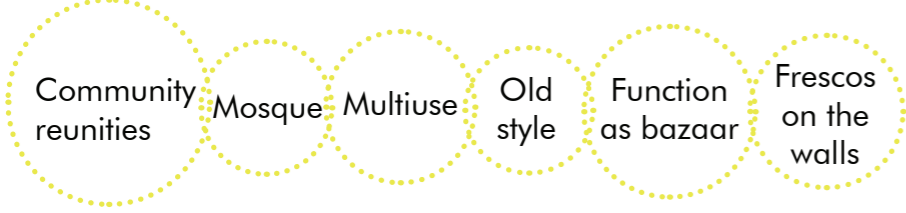
5.3.2 Interview

Would you return to Shusha?

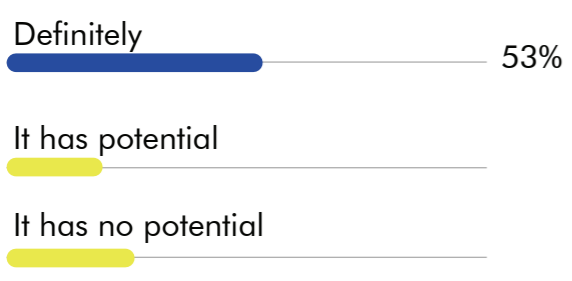


77% of interviewees would return to Shusha primarily because of its nature

What did you remember mostly about caravanserai?



Will reuse of caravanserai as bazaar again positively affect its identity?



86% would add secondary function

What are cons of bazaar function?

- | | |
|--|---|
| <p>Space</p> <ul style="list-style-type: none"> Small place to trade In city center Functions were not correctly distributed | <p>Function</p> <ul style="list-style-type: none"> May attract less tourist Noisy Maintenance |
|--|---|

Which service would you add?

- 33%** Slow food resraurant/ workshops
- 26%** Artisans shops/ workshops
- 26%** Museum/ cultural activities
- 15%** Boutique hotel

5.3.2.1 Highlights

Recurring words



From community:

"As with all places along the **Old Silk Road**, the caravan-serai-type buildings have both **historical and (for modern times) tourism significance.**"

It would be nice if the bazaar function was restored. This would **reduce the speed of traffic in the area** of Meydan fountain, thus creating natural conditions for **the restoration of Meydan fountain** in its place.

"Also, **the caravanserai was very functional**. As in European countries, tailors, barbers and other shops served guests, which attracted **the attention of travelers and guests** more. There is also a large mosque for worship."

"The architecture of Shusha should be modernized while **keeping the image of old Shusha**. In addition, I would like it to be a **tourist zone again like before.**"

"Modern construction methods were used during the restoration in Soviet period. **Concrete balcony bases, and metal construction roof**, spoil the historical appearance of the building"

"Shusha always had issues with still water, therefore, farming **was not improved in the city**, and bazaars were places where **outside trader could sell their products to Shusha community**"

"Food art in Shusha is mostly related to **slow food**. And it is very possible here, as among **80 type of plov dish known in Azerbaijan, 50 are cooked here**"

5.3.2.2 Interview considerations



Needs

- Bazar function restoration
- Increase attractiveness for tourists
- Add different commercial shops
- Improve flow, busyness of the space



Interests /desires

- Enlarge the area/use more space
- Besides Bazar and shops, restoration of guest house function
- Have possibility to monetize
- Have its greenery area



Problems

- The primary style of caravanserai has been modified
- The mosque has been ruined
- Upper floor is less utilized
- Issues with maintenance and noise



Opportunities

- Structure of the building, particularly second floor "rooms" creates opportunity to have different types of activities.
- Outdoor of caravanserai can be also utilized
- Cousine and cultural activities of Shusha permits to have variety of workshops in the site

5.3.3 General outcomes

Value of caravanserai for community



- Throughout history, Caravanserais have always been identified as historical monuments that were linked to the architecture and identity of Azerbaijan cities. Therefore till today, the preservation of their style and cultural value play a crucial role in the community and its history. In the case of the two-storey caravanserai, despite of occupation periods of the city, the community attempted to preserve its identity and style by adapting it to new functions. It can be observed traditional materials such as white stone and wood, oriental elements such as main facade ornament and typography, architecture, general division of the space, and the mosque were partially preserved till today. Unfortunately, the floor of the mosque, facades, and room divisions were destroyed/transformed by occupants.

Value of bazaar for Shusha community



- Almost all local interviewees have seen the caravanserai only when it has been utilized as a bazaar. For them, it was a place for gathering, trade, communication, and contribution. Located in the city center, it was one of the most-attended and well-known bazaars in the city. Its colorfulness, dynamism, and combination of the bazaar with many other small shops made it one of the most utilized services of this land. Thus it can be considered a social place representing the Shusha community in historical continuity.

Strategy development

6.1 Insights

6.1.1 Case studies of Bazaar.

New approaches

6.1.2 Key considerations

6.1.3 Possible design outcomes

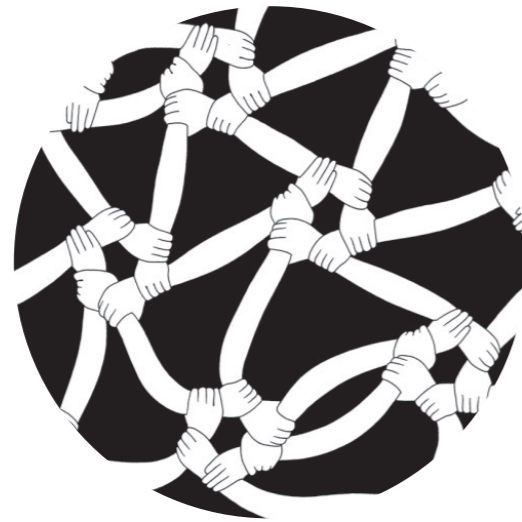
6.1.4 Design vision

6.2 Concept

6.2.1 Concept strategy

6.2.2 Design elements

6.3 Design drivers

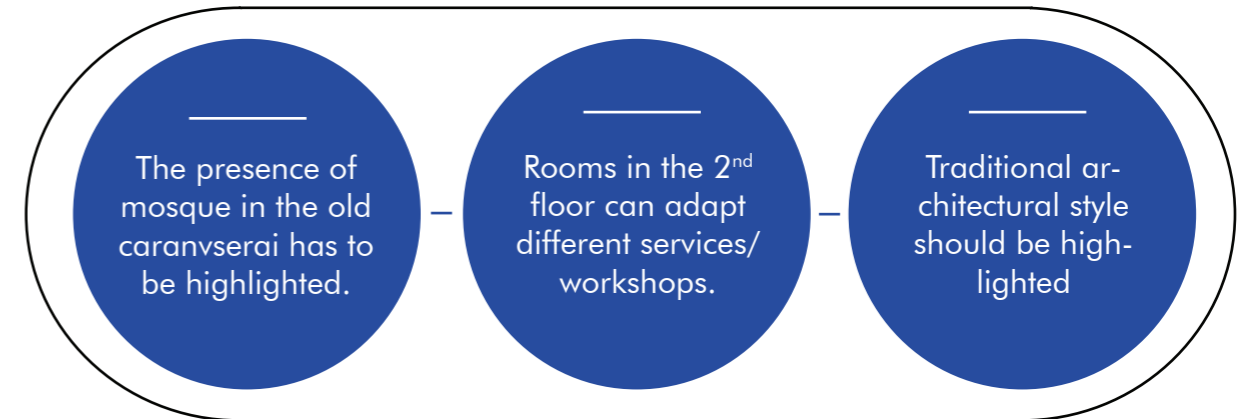


6.1 Insights

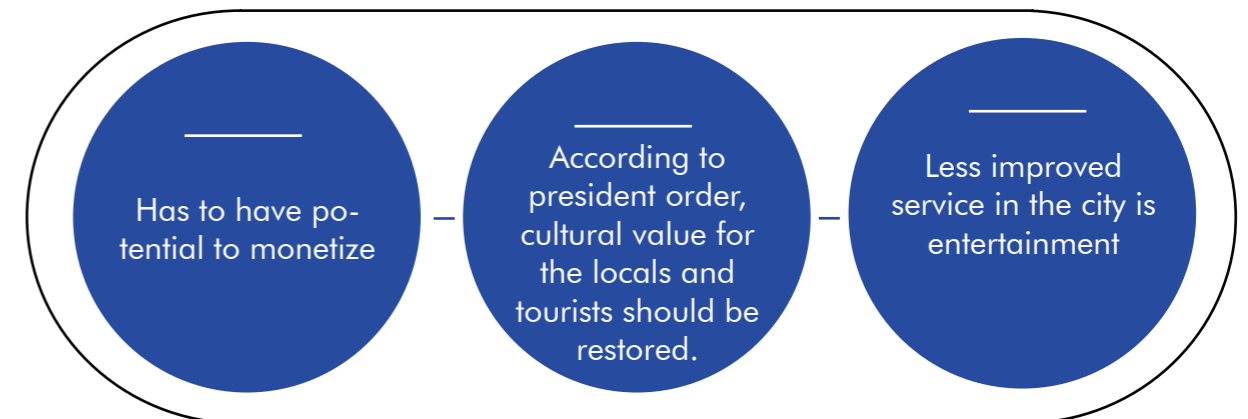
Interviews and desk research assisted in defining different points that should be considered in the decision-making process of adaptation of two-storey caravanserai. Overall gathered information can be divided into 3 insight categories: space-based, function-based, and user-based. According to studies and analyses, gentrification issues due to the vernacular adaptation cultural status of the city must be considered. Due to different periods of occupation, it was evidently transformed from its original shape. Even though the community attempted to preserve the main elements/areas, certain areas were partially ruined. Caravanserai was one of the most attended

places in the city. Therefore, most citizens wish to see it again as a bazaar, representing a social place. They suggest that the space has to adopt its initial service while improving it with modern approaches. Interviews and observations identified that the community of Shusha is tightly bound to its nature. According to them, the nature of Shusha city contributed to the development and worldwide recognition of artisanship, music, art, and poetry. Most interviewees strongly believe that two-storey caravanserai can be enriched with additional functions, however, the restoration of traditional style and elements must be considered.

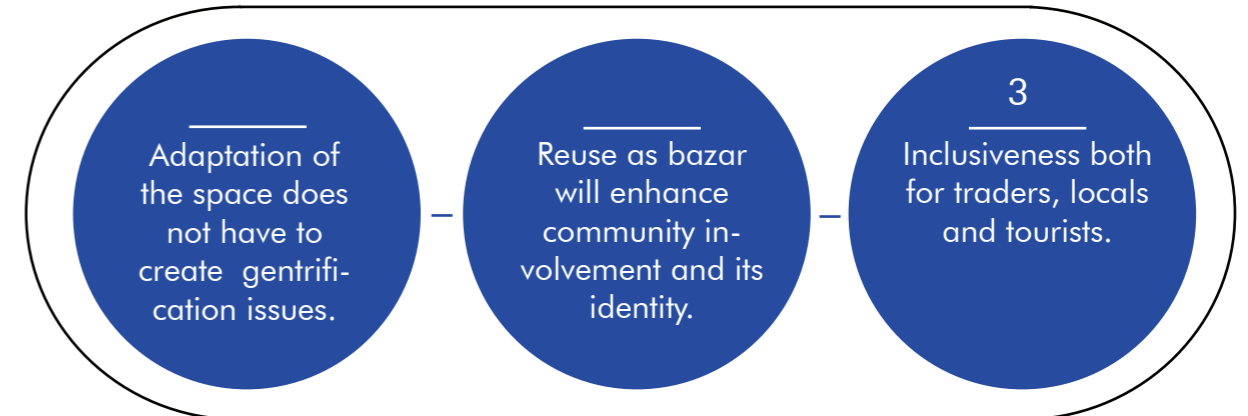
Space-based



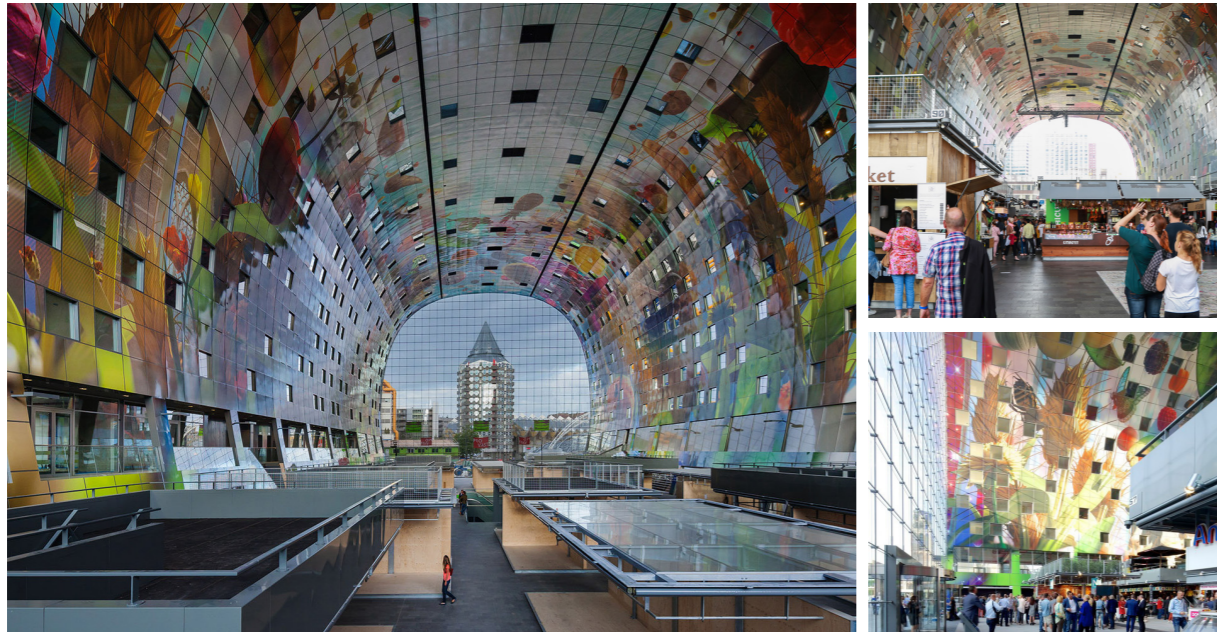
Function-based






User/User-based



6.1.1 Case studies of Bazaar. New approaches



Markthal Rotterdam

-  Location: The Netherlands
-  Architects: MVRDV
-  Year: 2014

Keywords:


Multi-use, city centrality, high accessibility, hybrid, attractiveness

Being in the city's historical center, Markthal is the first covered market in the Netherlands. Compared to other buildings, it is unique not only because of its colorful interior, shape, and height but also for combining different functions coherently. There is no other place in the world where an apartment complex with restaurants, grocery stores, and subterranean parking covers a fresh food market. The main goal was to construct an evident public building with good accessibility. To reach it, architects utilized a curve shape with a conventional elevator core, making it more appealing from the outside. In addition,

chosen colors and materials assisted in reaching this goal of drawing attention to the interior. The exterior of the building is finished in natural grey tones; due to the usage of glass for shop windows/doors and façade, the building is without a backside. Even though the market had to be as accessible to the public as possible, due to the weather conditions, it was closed off. From the interior part, most of the apartments have windows to the market, which are triple-glazed to avoid the sound.



SuperHub Meerstad Market

-  Location: The Netherlands
-  Architects: De Zvarte Hond
-  Year: 2022

Keywords:




Flexible, open layout, community center, interactive, multi-use

Superhub Meerstad market is located in the new district of Groningen. The area is popular for its greenery and open space, which will grow into a vivid neighborhood. Inspired by the request of the client to connect society and create an interactive social place, the architect decided to create a multifunctional and adaptive building for the neighborhood. The building will not serve only for shopping and eating but also for community gatherings, thus will create social sustainability in the neighborhood. Therefore SuperHub is a circular redesign of the conventional market hall architecture. In addition, consid-

ering the future expansion, the architect designed a flexible, open layout, which can be redefined to meet the shifting demands of the community. In the future, the structure could house a community center, a museum, or even residences. In this sense, SuperHub presents itself as a scalable community center that will expand with the district. Its adaptable design enables it to carry out various tasks and activities, including social events.



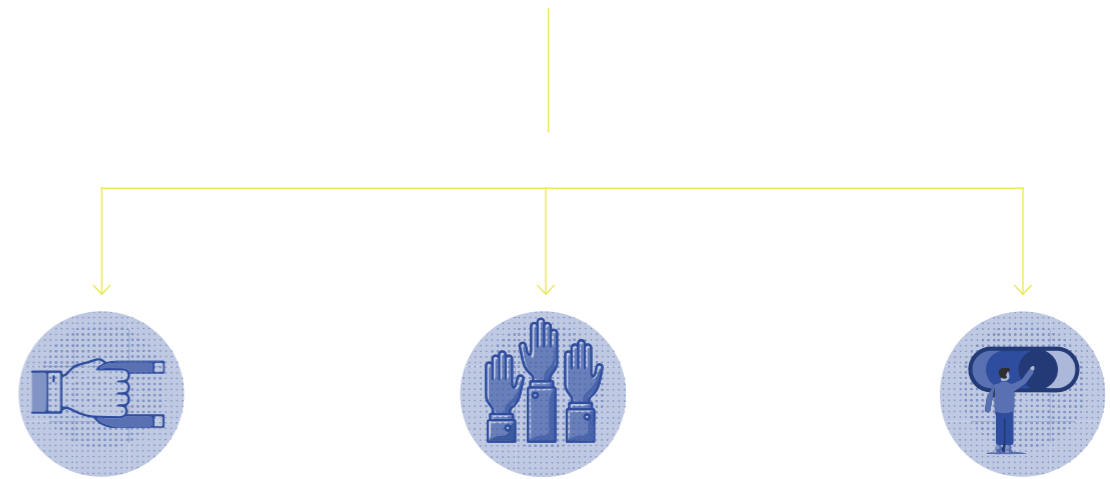
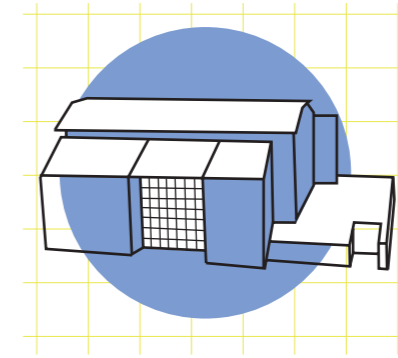
Braga Municipal Market

-  Location: Portugal
-  Architects: APTO Architects
-  Year: 2021

Keywords: Adaptive reuse, traditional architecture, operational fluxs, completed quickly due to the utilization of sustainable materials in the hybrid construction method. The new canopy was constructed with traditional wood construction combined with a modern style. Mixed initially and distributed across the entire building, the public spaces were rearranged and consolidated into the main square, where visitors can now easily view, read, and get to any stand. Every storefront was facing the central square instead of the interior. The makeover of the square had a more significant impact as it became the new hub for all public interaction.

Formerly built in the 1950s, Braga Municipal Market is located on the edge of the city center. It is a sample of the implementations of the adaptive reuse approach to an existing building, where architects could successfully preserve core elements of the primary building while adding a canopy and new ring. The building was developed by modifying its functional distribution, operational fluxes, and sanitary conditions, as well as by introducing new complementing valences like a food court, trash deposition systems, and delivery-oriented infrastructures. Despite its complex construction, the work was

6.1.2 Key considerations



ATTRACTIVENESS

A more enjoyable and livable place that will revitalize the area and the environment.

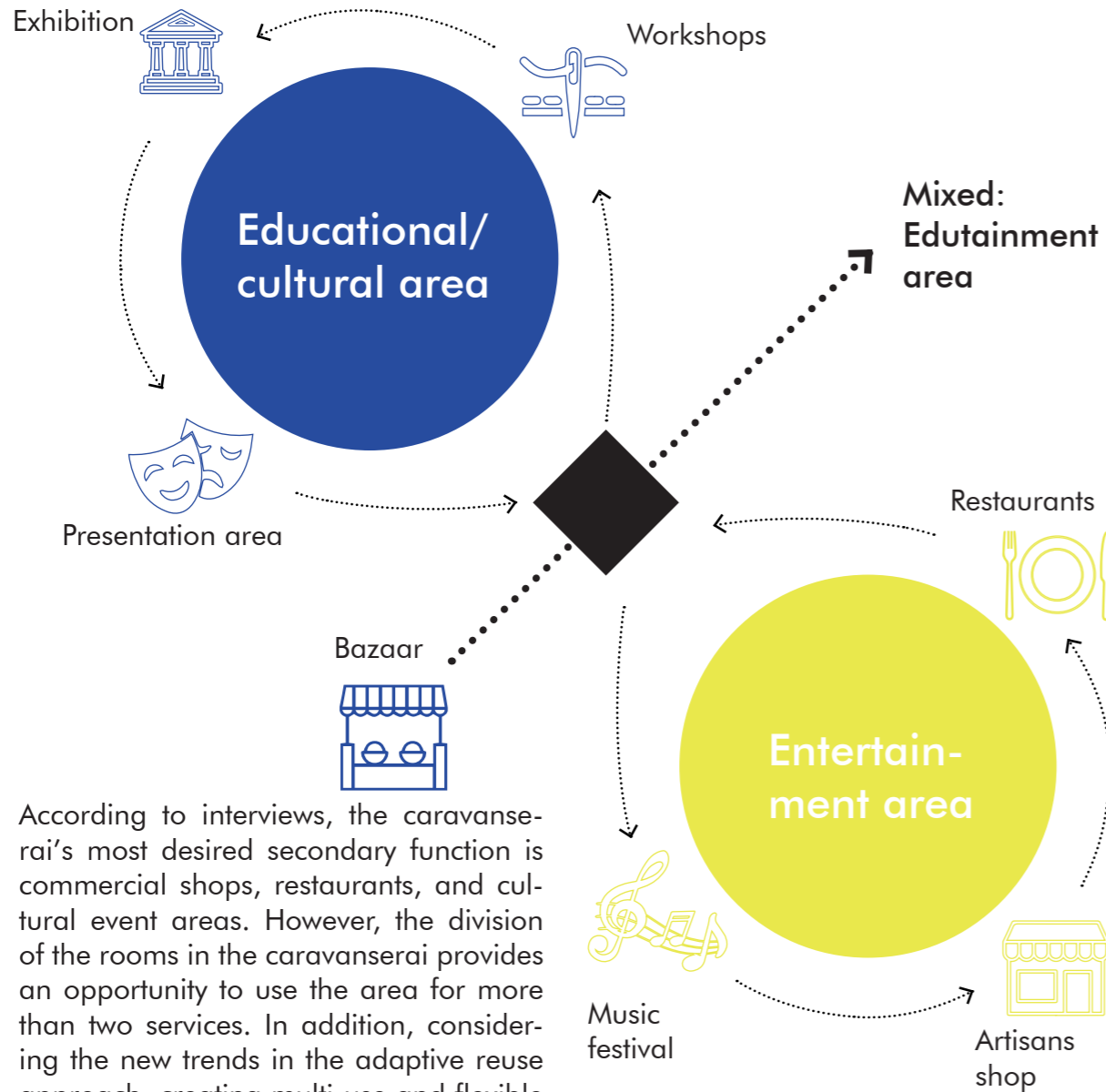
PARTICIPATION

A space that will involve the community, thus, will enhance community spirit and reassert a sense of identity .

HYBRIDIZATION

A flexible space that is adaptable to different functions to create new scenarios for new city life.

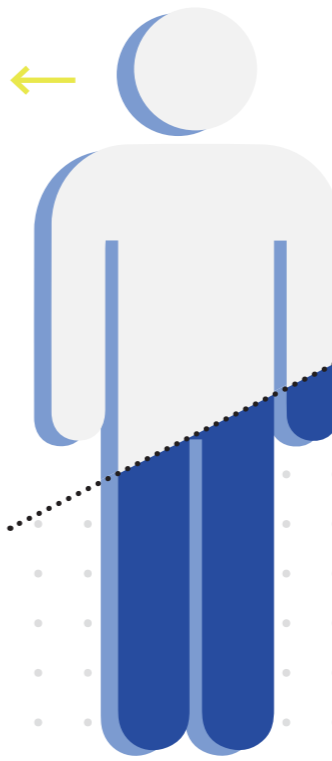
6.1.3 Possible design outcomes



According to interviews, the caravanse-
rai's most desired secondary function is
commercial shops, restaurants, and cul-
tural event areas. However, the division
of the rooms in the caravanse-
rai provides an opportunity to use the area for more
than two services. In addition, consider-
ing the new trends in the adaptive reuse
approach, creating multi-use and flexible
spaces is advisable. Therefore the goal
is to create a community center, a social
place with a primary function as a bazaar
and a secondary function as an edutain-
ment place where local artisans will not
only sell their products but also teach/
present their skills. This will assist in con-
tributing to community participation and
communication.

Mixed-Community center

Local citizen



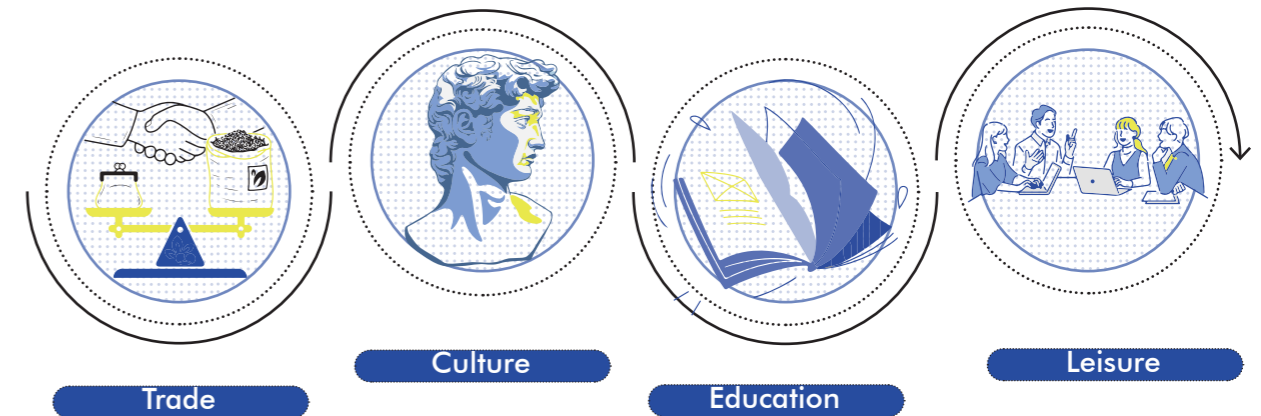
Social tool implemented in society

The vision is not only to provide a place
with the primary necessities of the com-
munity but also to strengthen social iden-
tity and a sense of place and contribute to
its cultural and educational development.
A space where locals will sell their prod-
ucts, share their knowledge and learn new
skills.

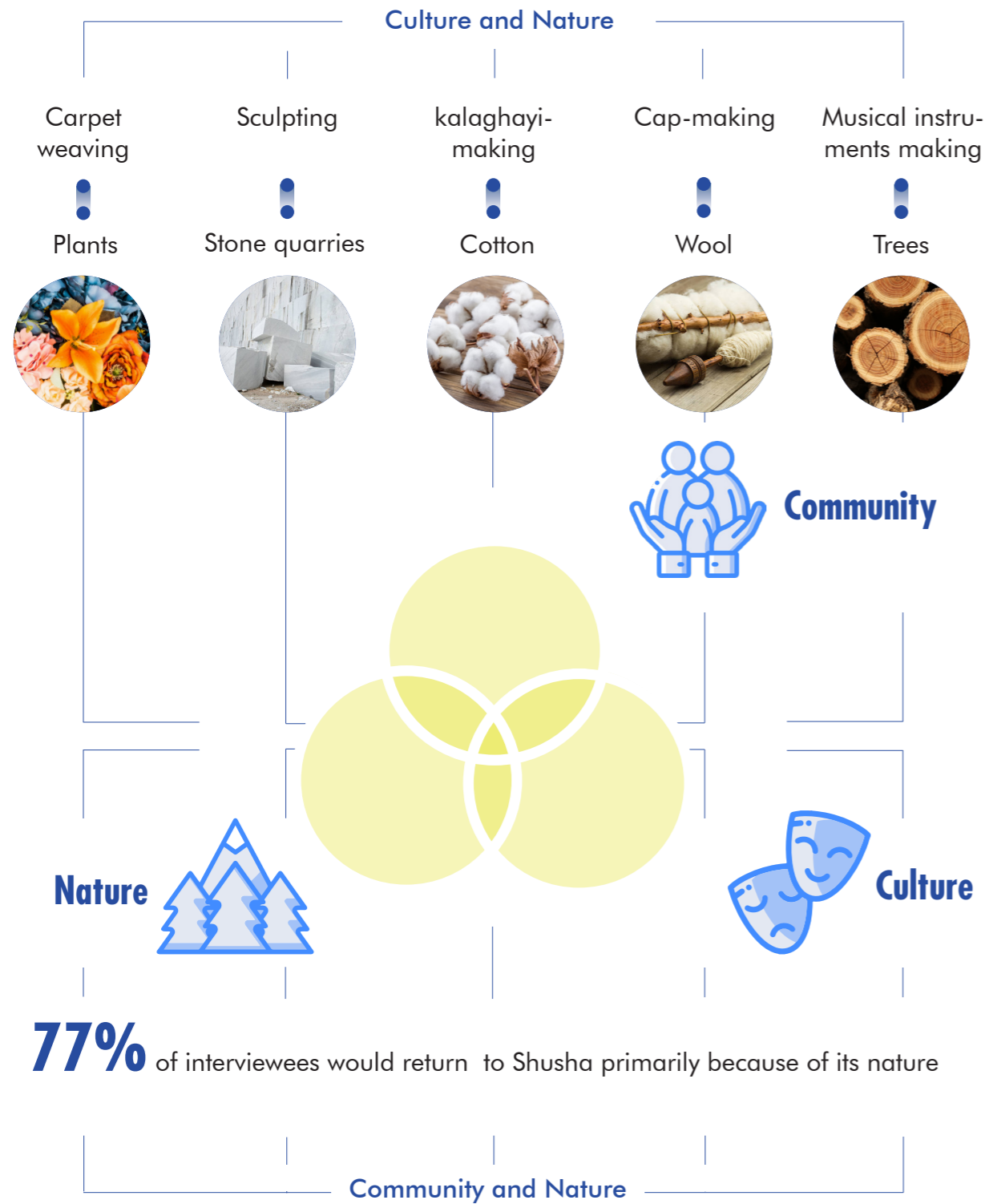
Identity
catalisator

Citizen as the protagonist
of the city.

It will contribute to community business, impacting community revitalization and be-
coming an extensive ecosystem. Through this collaborative spirit, every member can
play a role in shaping society.



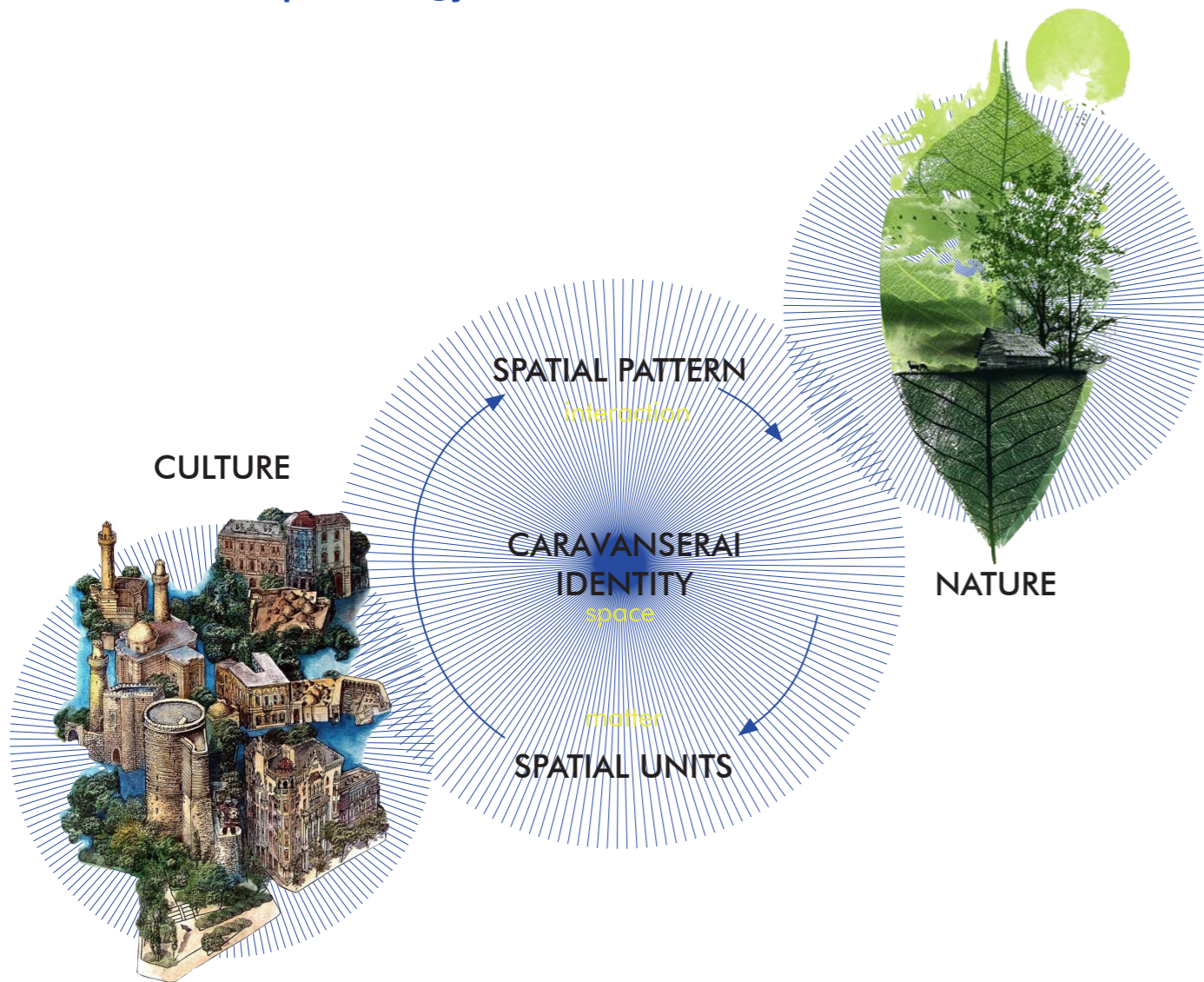
6.1.4 Design vision



Many artisanal works that were developed in Shusha and made it well-known in the whole world are directly or indirectly connected with the nature of the city. The patterns and colors of carpentry were taken from nature; its rich land contributed to the improvement of jewelry, blacksmithing, and preparation of musical instruments. Many musicians dedicated the song to its beauty. This must also be why most interviewees desired to come to Shusha, mainly for its nature, weather, and beauty. Thus the vision is to demonstrate the role of Shusha nature in everyday life and how nature is connected with the city's identity.

6.2 Concept

6.2.1 Concept strategy



New Identity

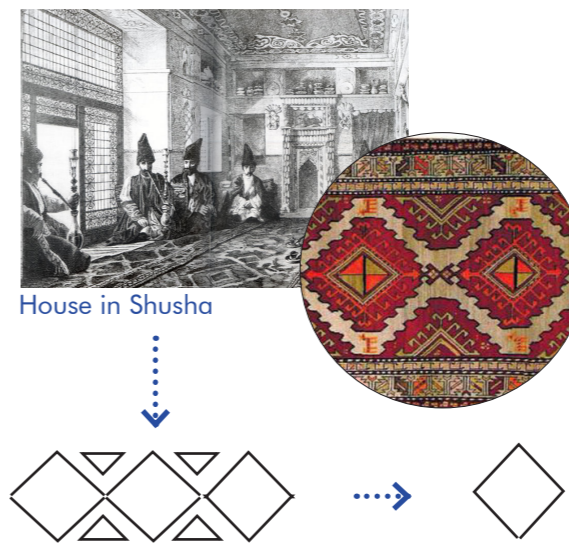
The architectural and aesthetic heritage of 2-storey caravanserai is the project's foundation. The proposed space units are modern interpretations of the highly **suggestive and dominating elements** of the caravanserai to evoke

legacy of its past. Combining these elements with flexibility and modularity, the new project of caravanserai will feel familiar and fresh. It is **firmly rooted in the heritage yet evolves into the future.**

Caravanserai identity



Culture



Carpet weaving is one of the most ancient and significant types of Azerbaijani folk arts and crafts, the traditions passed down from generation to generation. The **spiritual values** of the entire Azerbaijani people are embodied in carpets.

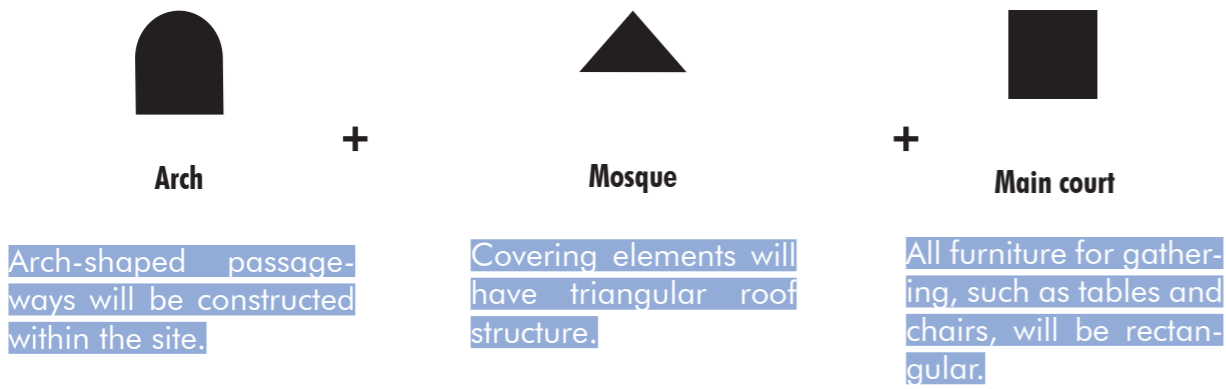
Nature



Oprhys caucasica, or Khari-bulbul in Azerbaijani, is one of the rarest species of bee orchids family in the world, which is under extinction. This bird-like flower naturally grows in the mountains of Shusha, therefore **very often associated with the city**, so many legends are dedicated to it.

6.2.1 Design elements

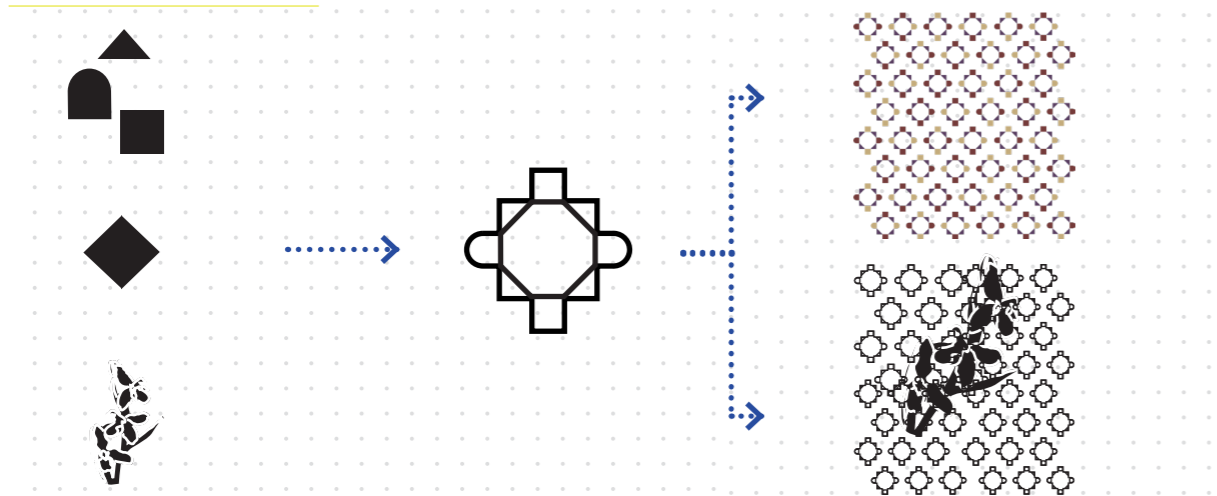
Spatial Units



The defining characteristics of a caravanserai are its arches, which served as gateways between the inner rooms and the central court, which will be re-interpreted in a modern way. In addition, some caravanserais included a mosque that served a variety of purposes during distinct his-

torical periods. The main court served as a focal point where people would gather to communicate. Therefore, surrounding seating and resting areas are designed to reflect the court's shape and layout, emphasizing its significance as a gathering place.

Spatial Pattern



6.3 Design drivers

Moodboard

ORGANIC BRIGHT
TRANSPARENT
COLORFUL
FAMILIAR
GREEN



Colors and materials





Spatial analysis

7.1 User experience

7.1.1 Definition of users

7.1.2 User journey

7.2 Services

**7.2.1 Activities in Bazaar, tools
and users**

**7.2.2 Educational services,
tools and users**

**7.2.3 Entertainment services,
tools and users**

7.3 Spatial development

7.4 Settings

7.4.1 Spacial units

7.4.1.1 Flexible settings

7.4.1.2 Static settings

7.4.1.3 Scenarios

7.4.2 Spacial pattern



7.1 User experience

Four distinct user profiles have been identified based on interviews and data analysis: native, newcomer, visitor, and participant. Each user type has distinct needs, expectations, and interactions with the space's functions. The circulation patterns of each category of user vary and can shift throughout the day. For instance, the native user is primarily

concerned with the Caravanserai's essential functions, whereas the newcomer may be more interested in the entertainment area. A newcomer may, for instance, attend a masterclass at 3 p.m., while a visitor may visit the exhibition area. Users and time intervals have been carefully outlined to ensure a smooth and transparent experience for all user categories.

7.1.1 Definition of users

NATIVE

Age: 40+
Living in Shusha: since birth

Time spent: Shorter time to Longer time (slider positioned towards Shorter time)

Type of experience: Walking to Meeting (slider positioned towards Meeting)

Shared with: Alone to With someone (slider positioned towards Alone)

The Native user is the one who was born and grew up in Shusha. They are deeply connected with the city and know its historical past and culture. Most are in their golden age and mostly use essential city services.

NEWCOMER

Age: 10-30
Living in Shusha: recently

Time spent: Shorter time to Longer time (slider positioned towards Longer time)

Type of experience: Walking to Meeting (slider positioned towards Meeting)

Shared with: Alone to With someone (slider positioned towards With someone)

The Newcomer user is the one whose parents are from Shusha. They heard a lot about the city but have now started to experience it. They care considerably less about historical heritage and mostly look for entertainment services.

VISITOR

Age: 40+
Living in Shusha: temporary

Time spent: Shorter time to Longer time (slider positioned towards Longer time)

Type of experience: Walking to Meeting (slider positioned towards Meeting)

Shared with: Alone to With someone (slider positioned towards With someone)

The Visitor users are the tourists. They have no connection with the city, and they are temporarily in the city. They are active users who are primarily interested in observing historical buildings, culture, and traditions.

PARTICIPANT

Age: 30-50
Living in Shusha: recently

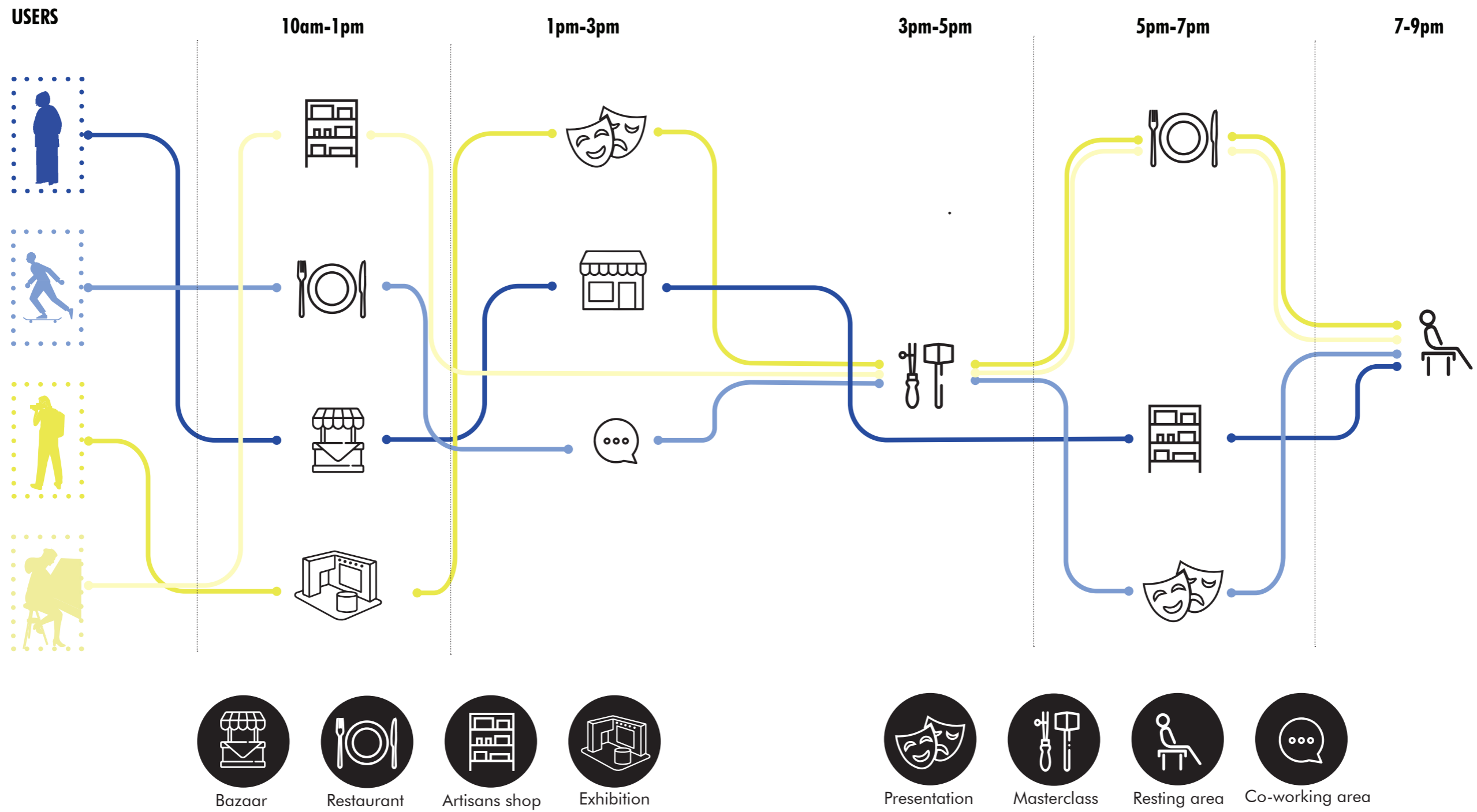
Time spent: Shorter time to Longer time (slider positioned towards Longer time)

Type of experience: Walking to Meeting (slider positioned towards Meeting)

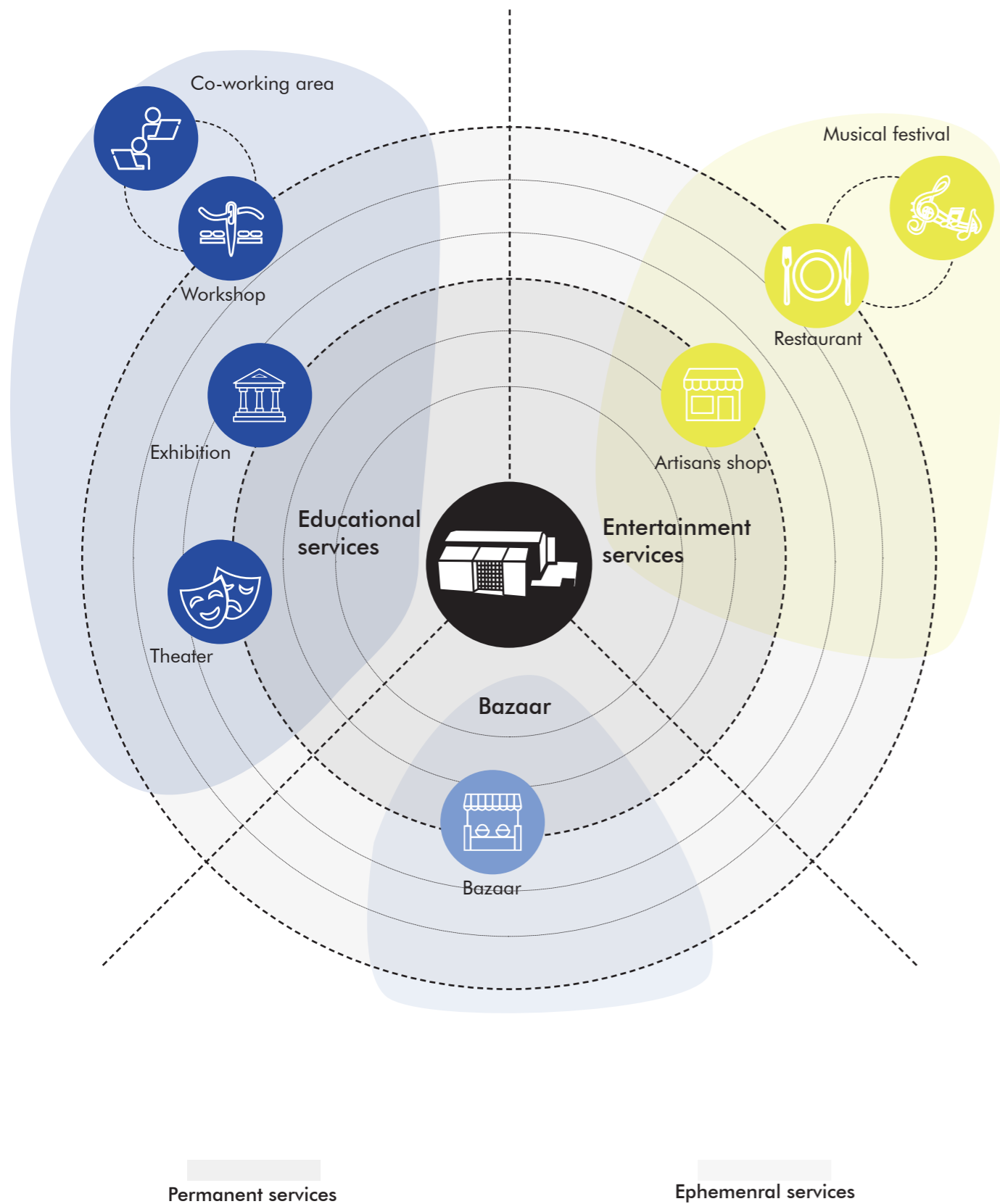
Shared with: Alone to With someone (slider positioned towards With someone)

The Participant user is the one who might have a connection with the city. They don't only know the culture of the city, and they are also artisans. Therefore they are valuable inhabitants who can convey their skills to new locals.

7.1.2 User journey

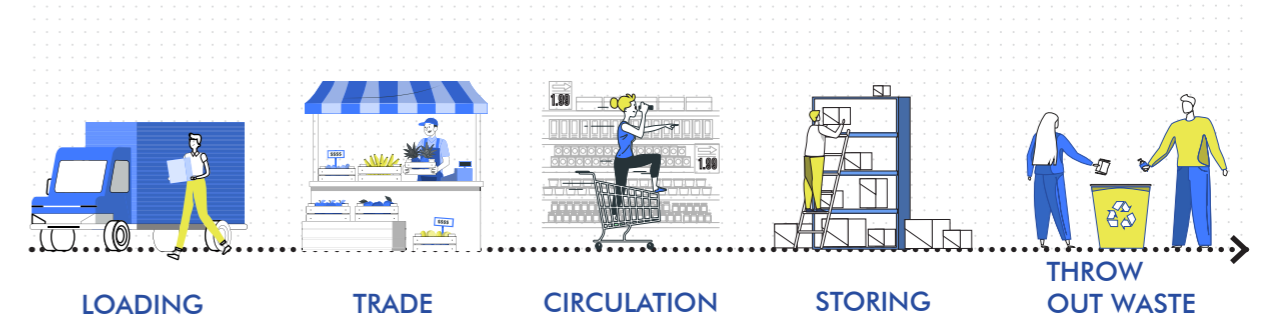


7.2 Services



7.2.1 Activities in Bazaar, tools and users

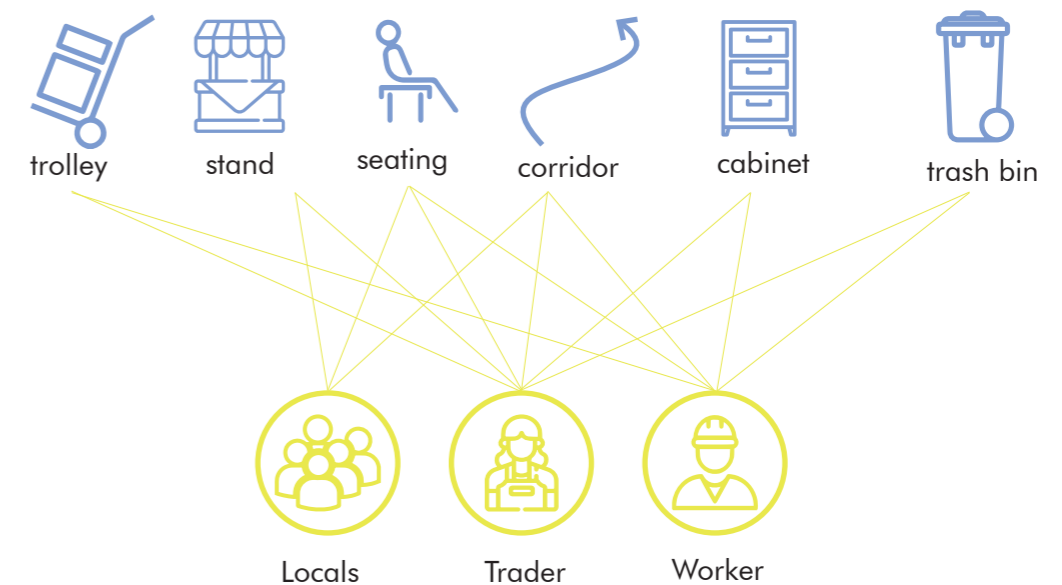
Activities



Bazaar is a local marketplace that facilitates peer-to-peer transactions for a variety of products. As a principal community service provider, the Bazaar provides a daily supply of fresh, locally sourced goods. The functionality of the platform is derived from the complex interactions of its diverse user base, necessitating a smooth and well-defined flow for all parties involved, from product loading and offloading to the actual trading process.

The Bazaar provides a platform for buyers to search for and purchase desired goods and services effortlessly. Daily, employees are responsible for offloading and categorizing the products in the storage area. In the meantime, vendors may set up their booths, display their merchandise, and dispose of expired items as necessary.

Tools and users



7.2.2 Educational services, tools and users

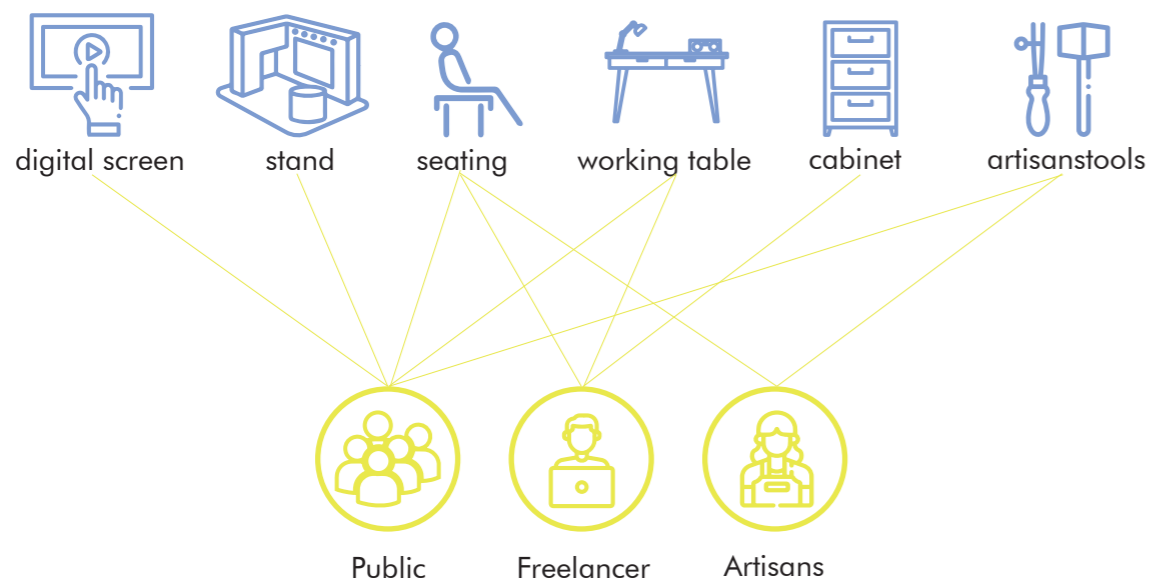
Activities



The caravanserai’s educational activities are a valuable addition to its services, as they serve to familiarise both young people and travellers with the culture and history of Shusha. Instead of focusing on the transaction of goods, these activities emphasise the exchange of knowledge. Visitors to the caravanserai can peruse the exhibition area and theatre to learn about the city’s history, with workshops by locals completing the experience. Locals can share their skills and knowledge

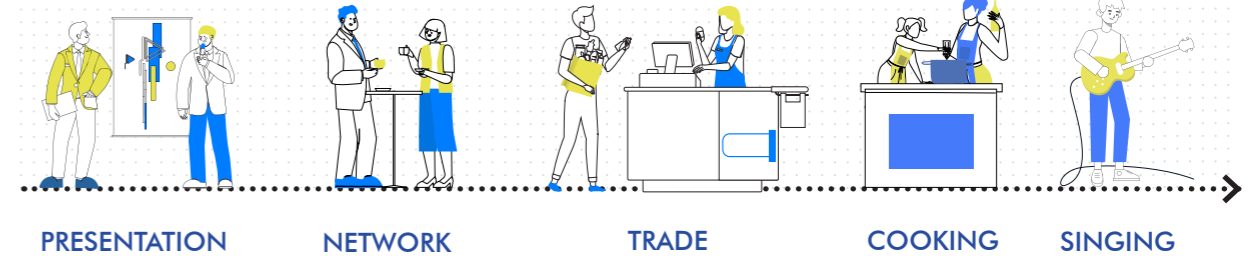
with others in workshop areas for arts and crafts. The workshop areas also provide a venue for local artisans to collaborate and sell their wares to a wider audience. By providing a space for the exchange of knowledge and skills, the educational activities aim to preserve and promote Shusha’s cultural heritage while cultivating a sense of community and collaboration among the city’s residents and visitors.

Tools and users



7.2.3 Entertainment services, tools and users

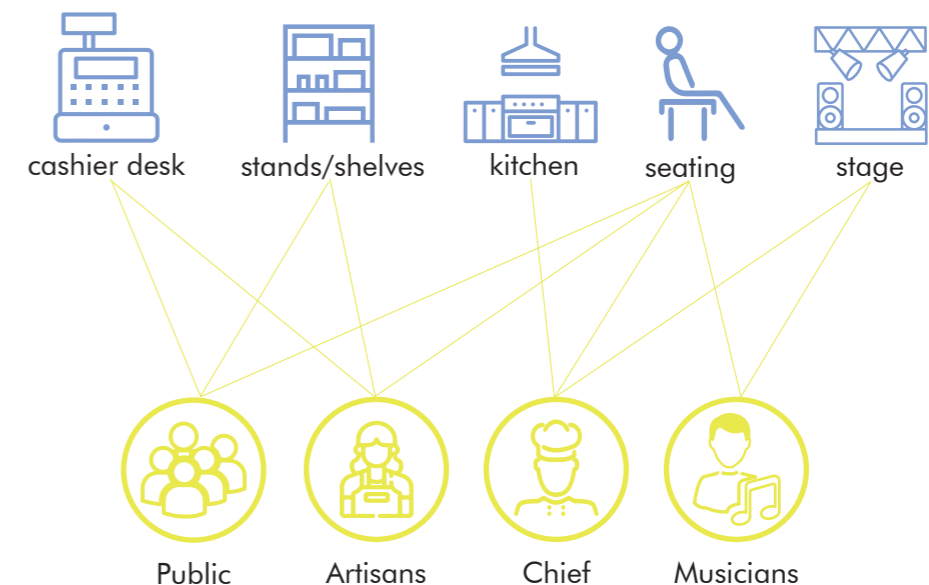
Activities



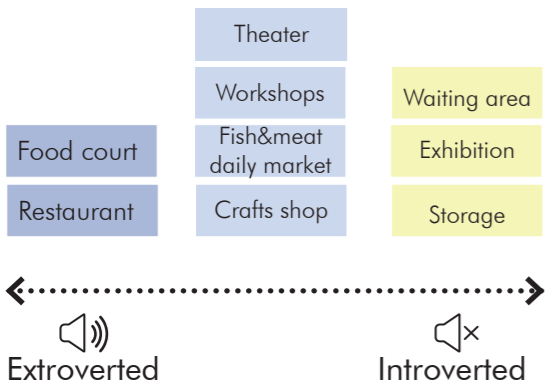
The entertainment activities of the Caravanserai have been designed to satisfy the desires of 21st-century residents seeking an exciting and entertaining experience. These services are located within the bazaar, fostering social interaction and communication among various user groups, including locals, tourists, and the young and elderly. The Caravanserai provides a venue for locals to demonstrate their culinary exper-

tise and sell traditional dishes in a food court setting. When the bazaar closes in the evening, the area is transformed into a venue for local musicians to perform. Moreover, the Caravanserai’s artisanal shops enable tourists to purchase hand-made souvenirs and other locally crafted items.

Tools and users

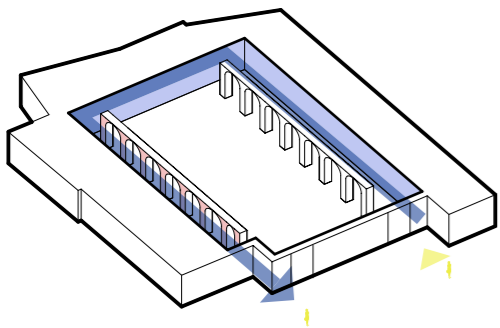


7.3 Spatial development



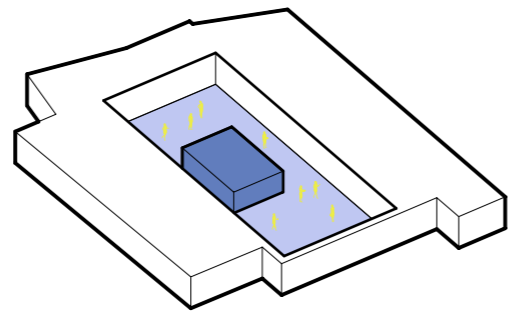
Program division

The categorization of programs into clusters and divisions can be based on the noise level related to each program. In particular, some programs can be classified as extroverted and some as introverted.



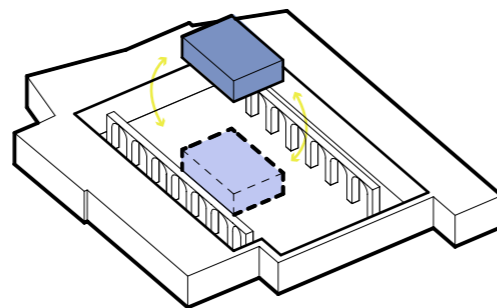
Spatial circulation

By moving the bazaar area close to the promenade of the caravanserai, maintenance and appeal were enhanced. This strategic move minimized noise levels while creating a clear and unique flow that allows visitors to evaluate all products.



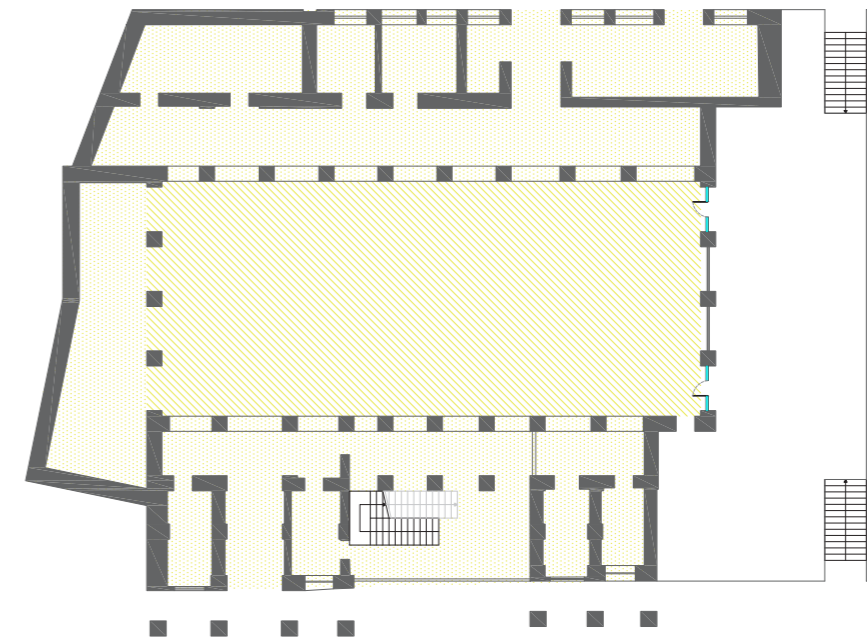
Central piazza

The public areas were rearranged and concentrated into the main square, where you can easily see and reach any stand. This makes it easier to experience the bazaar as a whole.

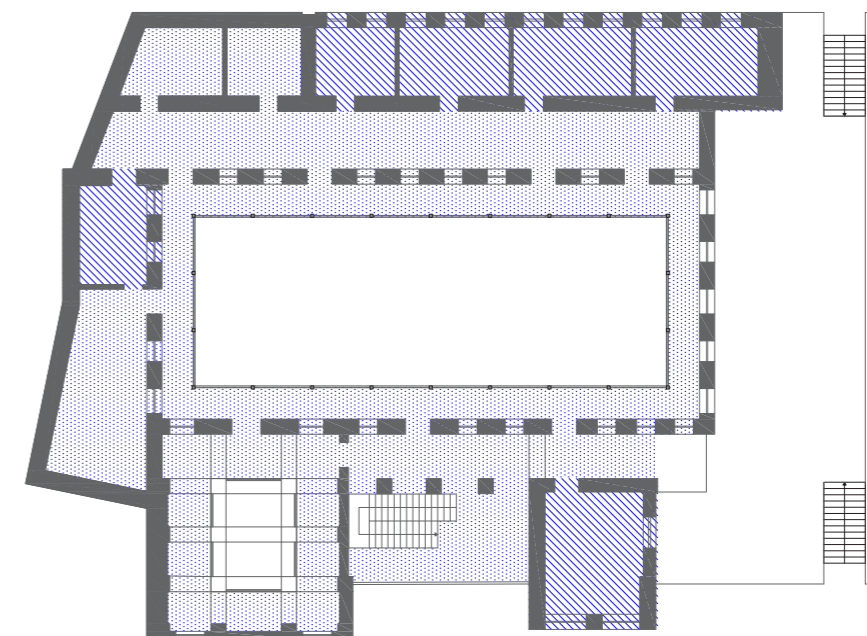


Spatial flexibility

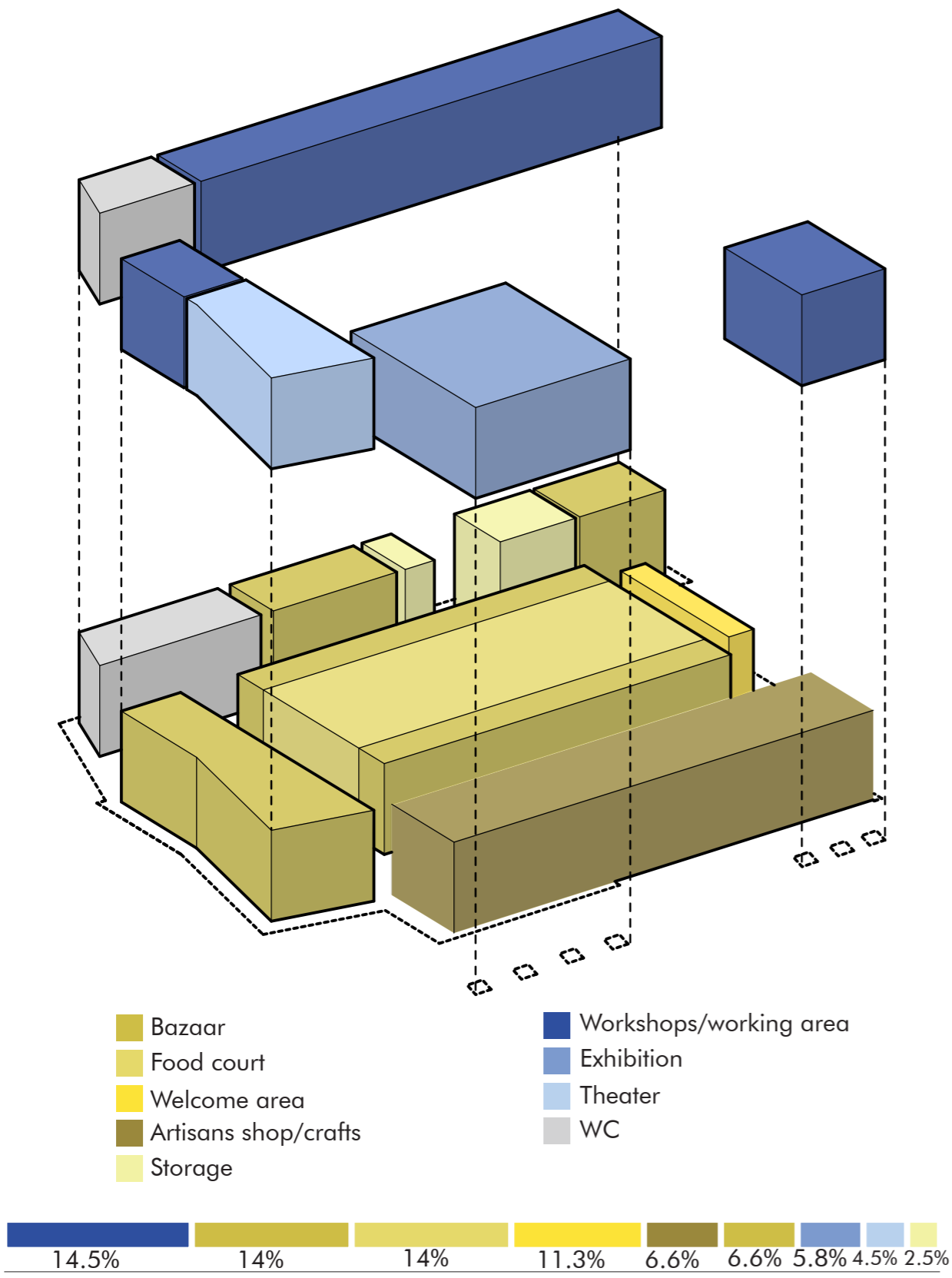
Transparent, light, and flexible structures enable versatile layout options and usage adaptation that can be implemented both in the present for temporary activities (such as music festivals) and in the future for a complete change of activities in the interior.



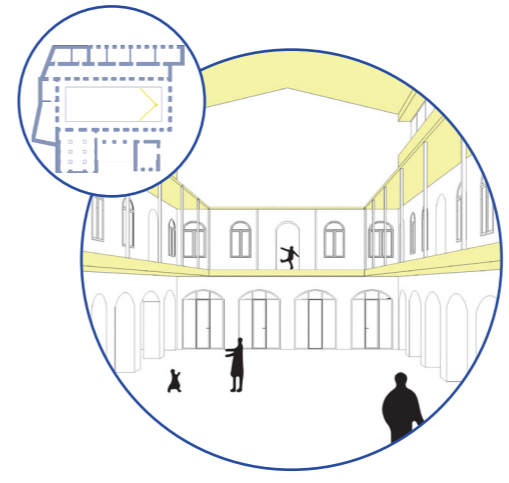
entertainment area permanent services entertainment area temporary services



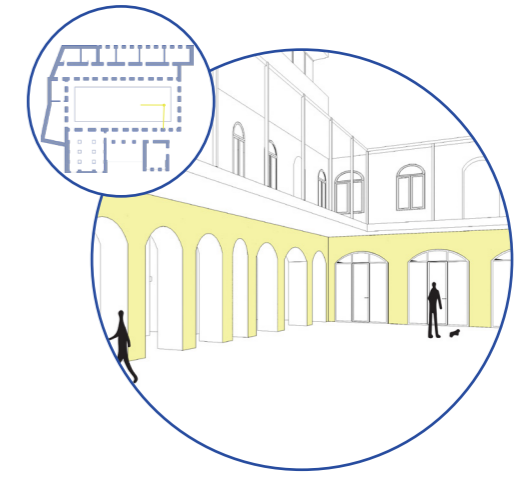
educational area permanent services educational area temporary services



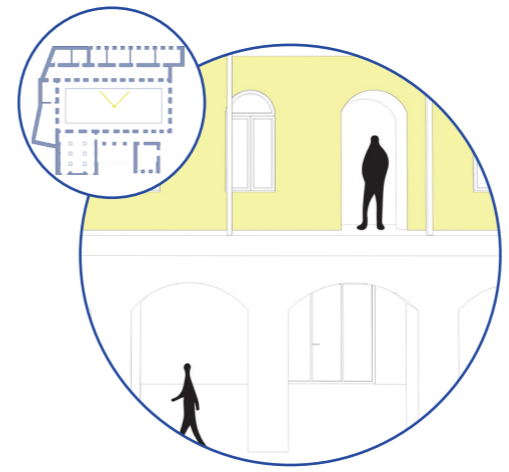
7.4 Caravanserai identity



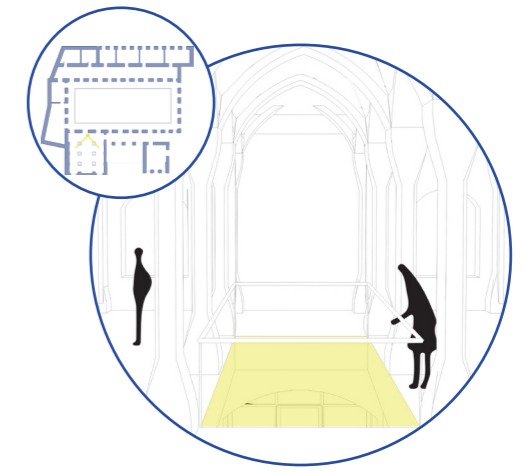
General architecture of the building



Arches



White stone walls



Floor of the Mosque

7.5 Settings

7.5.2 Spacial units

Morphotypes



Arch

Arches' functional role as **passageways** will manifest in the modern interpretation of their shape.



Central fountain

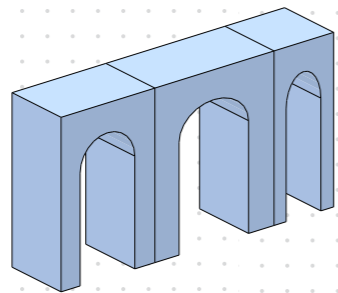
The modern interpretation of the central fountain will reflect its functional role as a **community gathering place**.



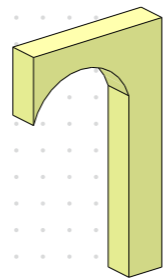
Mosque

The **mosque's outdoor view as shelter** will be reflected in its modern interpretation and design.

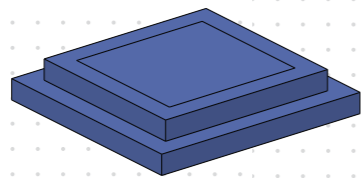
Variations



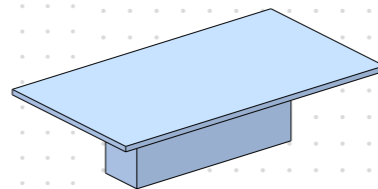
Bazaar setting



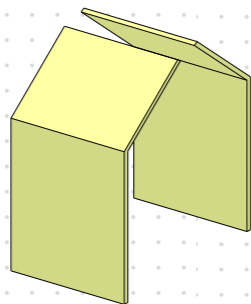
Separators/passage



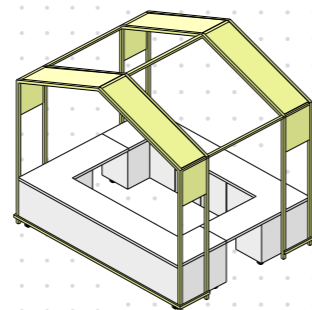
Central sitting



Tables/seats/reception



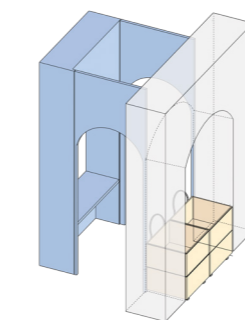
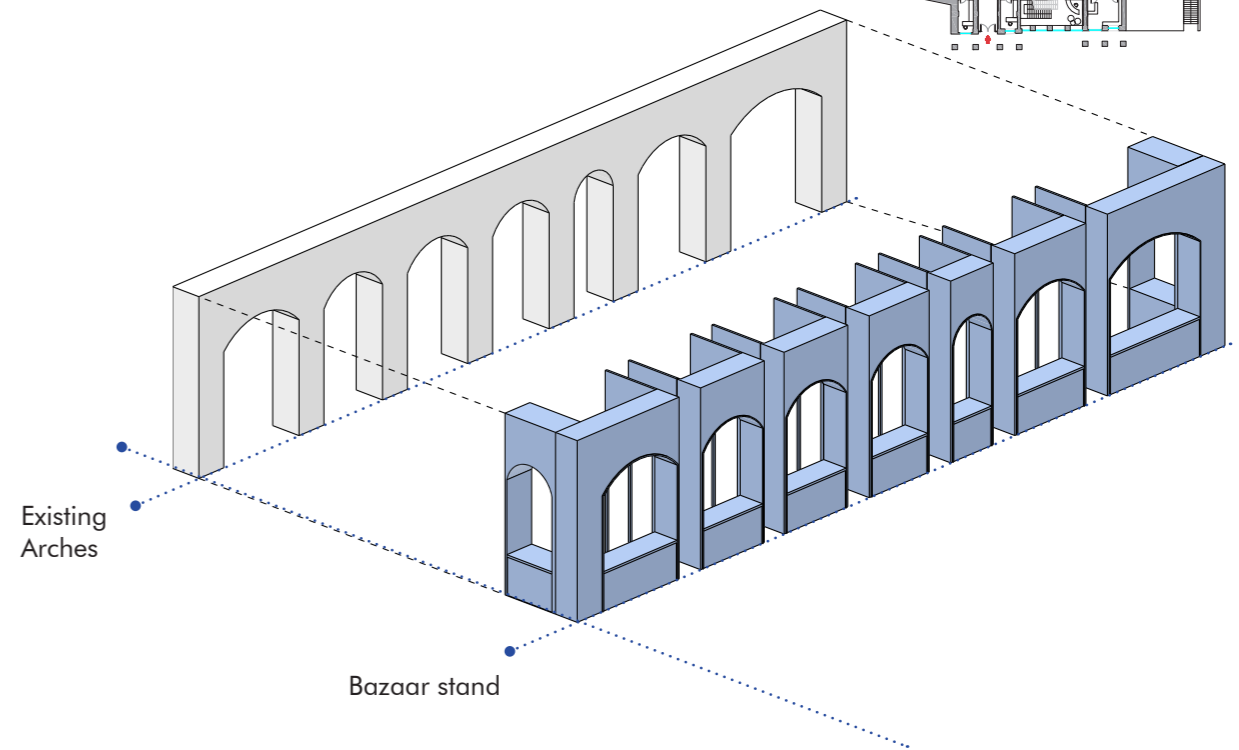
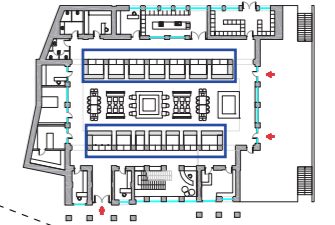
Covering



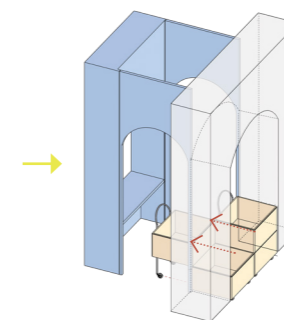
Kitchen

7.4.2.1 Flexible settings

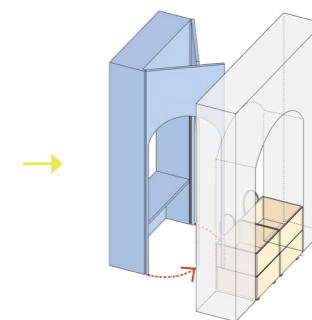
Bazaar setting



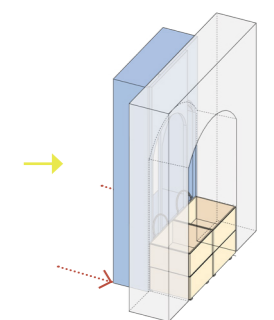
1. Bazaar in an open configuration.



2. Bazaar boxes can extend according to need.

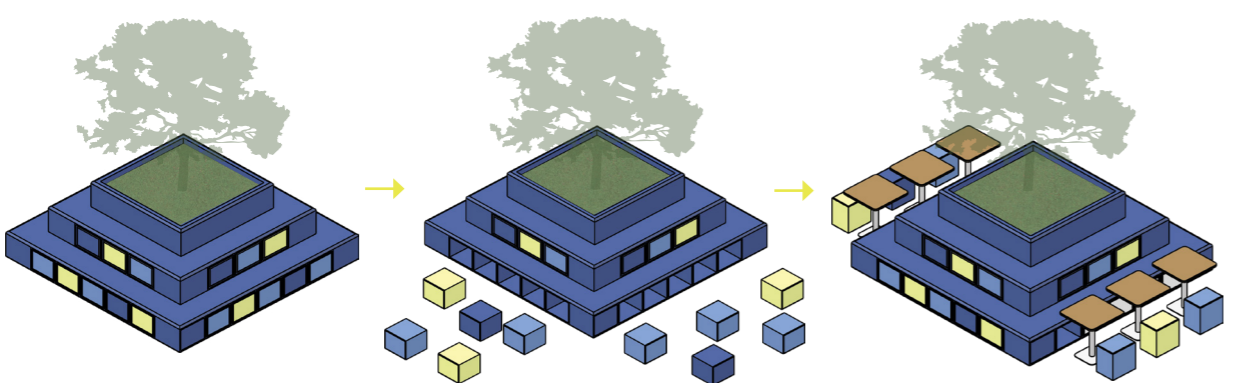
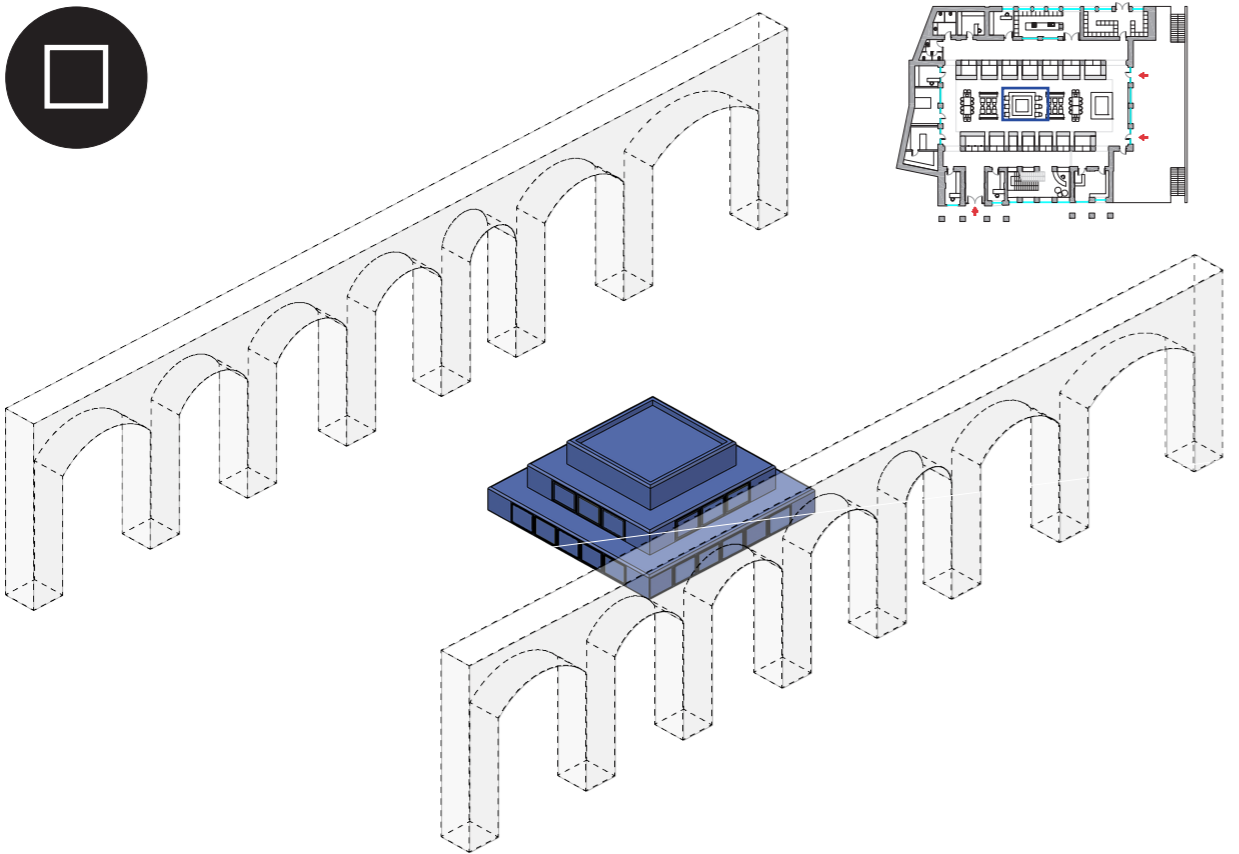


3. Bazaar sides can be closed as a box.



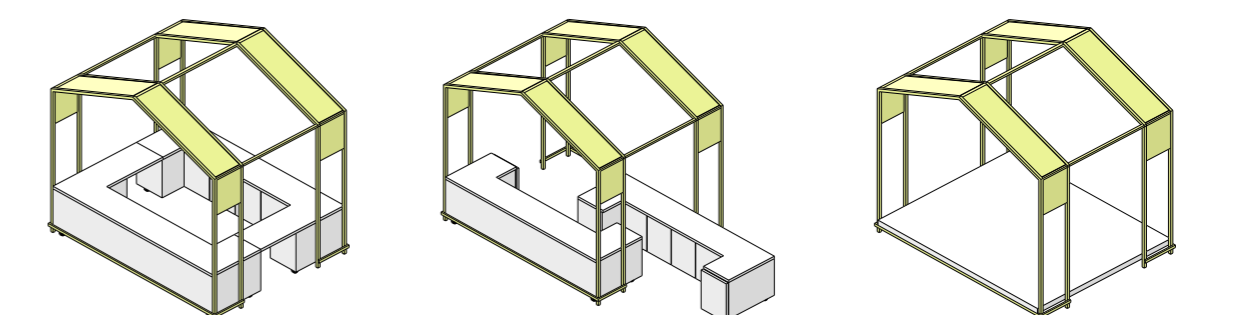
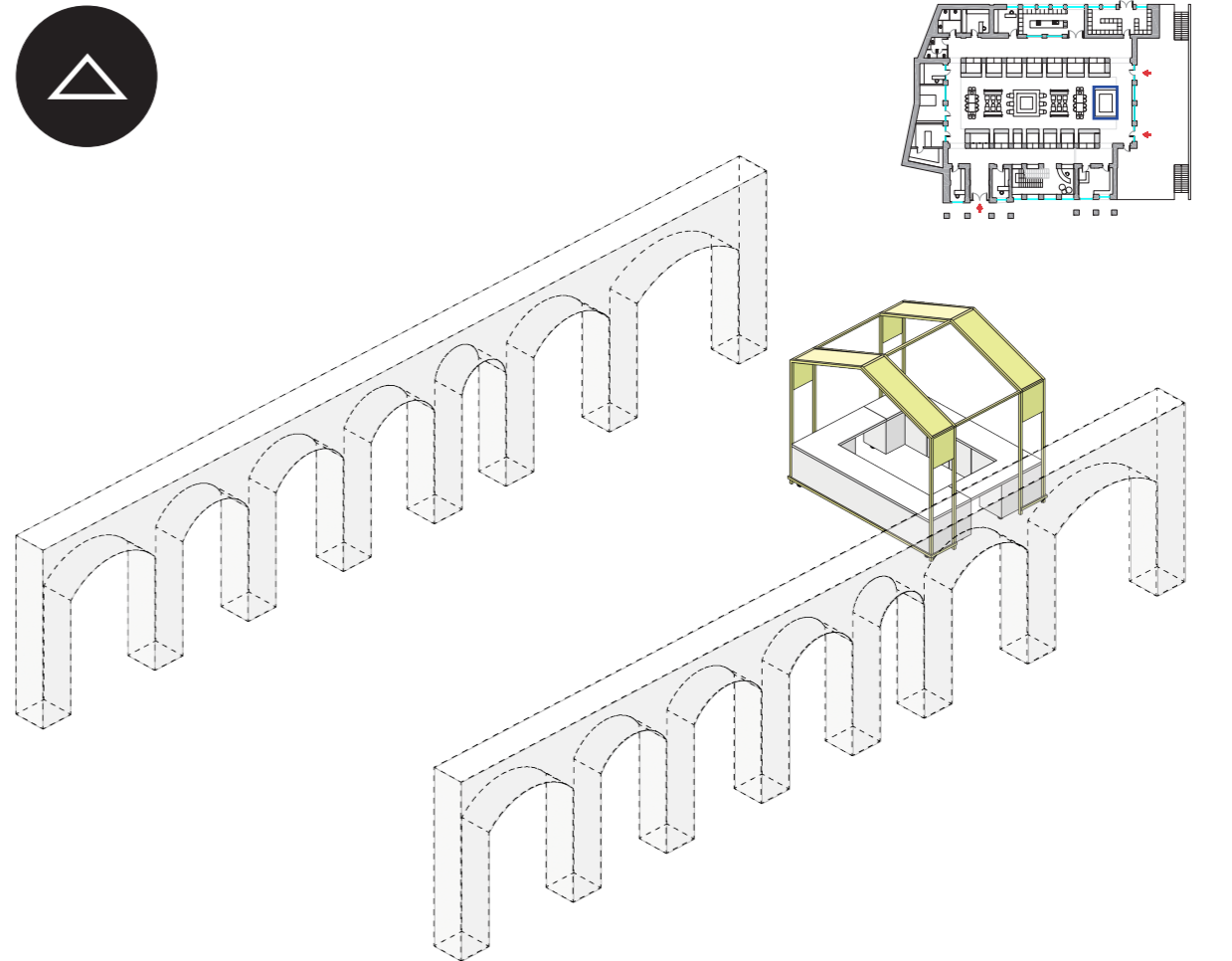
3. The model move front in special events.

Central sitting area



- 1. Central table in a closed configuration.
- 2. The poofs inside the furniture can be used for extra sitting places.
- 3. Central furniture can be used for restaurant service

Kitchen

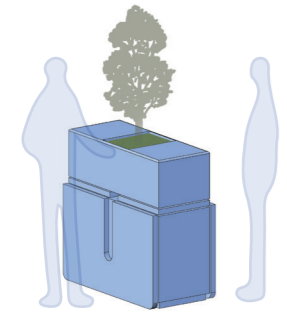
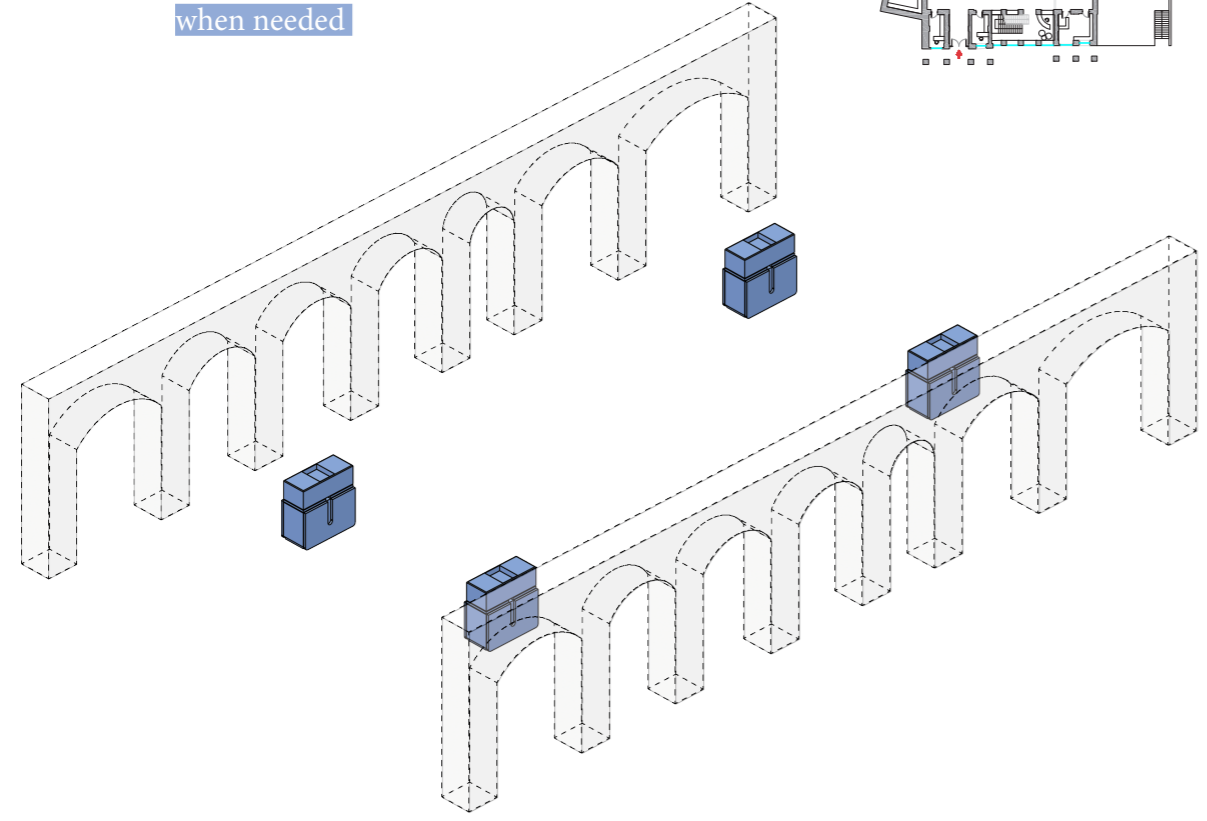
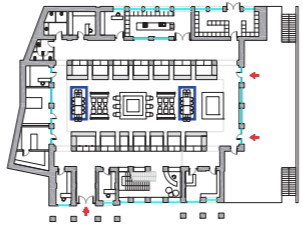


- 1. Kitchen configuration of restaurant.
- 2. The furniture rollers provide mobility and flexibility.
- 3. "Covering" is a static structure that enables the addition of various pieces of furniture, i.e., it can be a base for the stage.

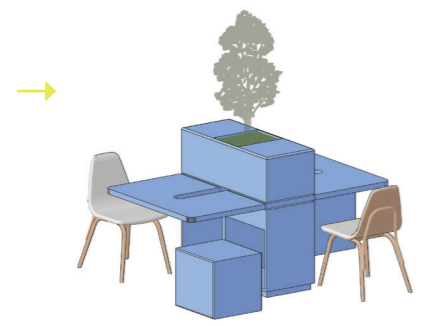
Tables



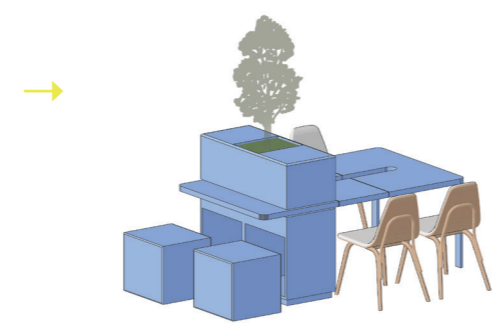
writing telling that even though bazar is permanent function, it has to be able to close and open when needed



1. Table in a closed configuration used for bar service.



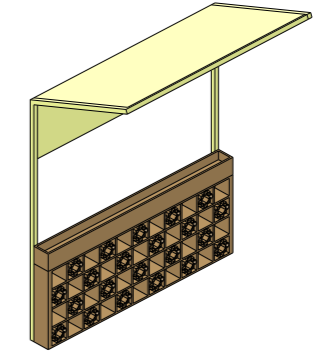
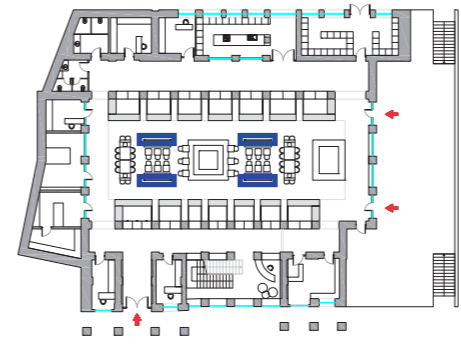
2. Table configuration for restaurant service.



3. Table length can be configured based on the utility.

7.5.2.2 Static settings

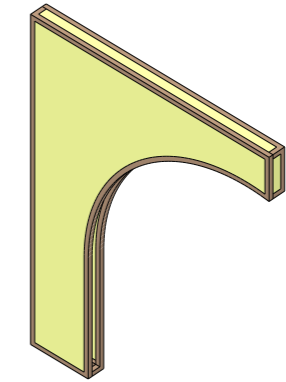
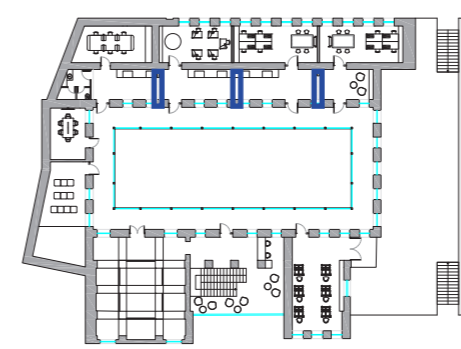
First floor



Covering

The tents are decorative elements that assist to divide area visually to sections.

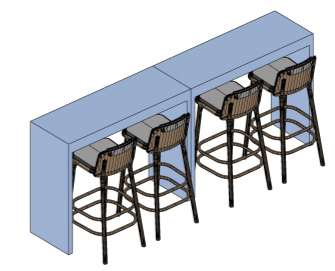
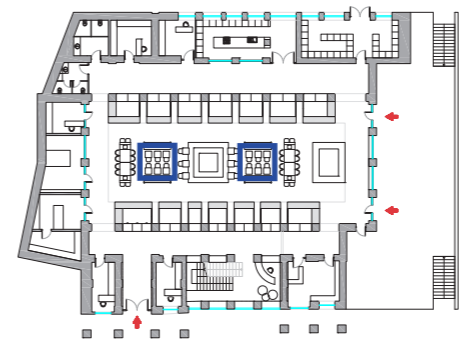
Second floor



Separators

On the second floor, passage elements function as dividers between workshops.

First floor



Sitting area

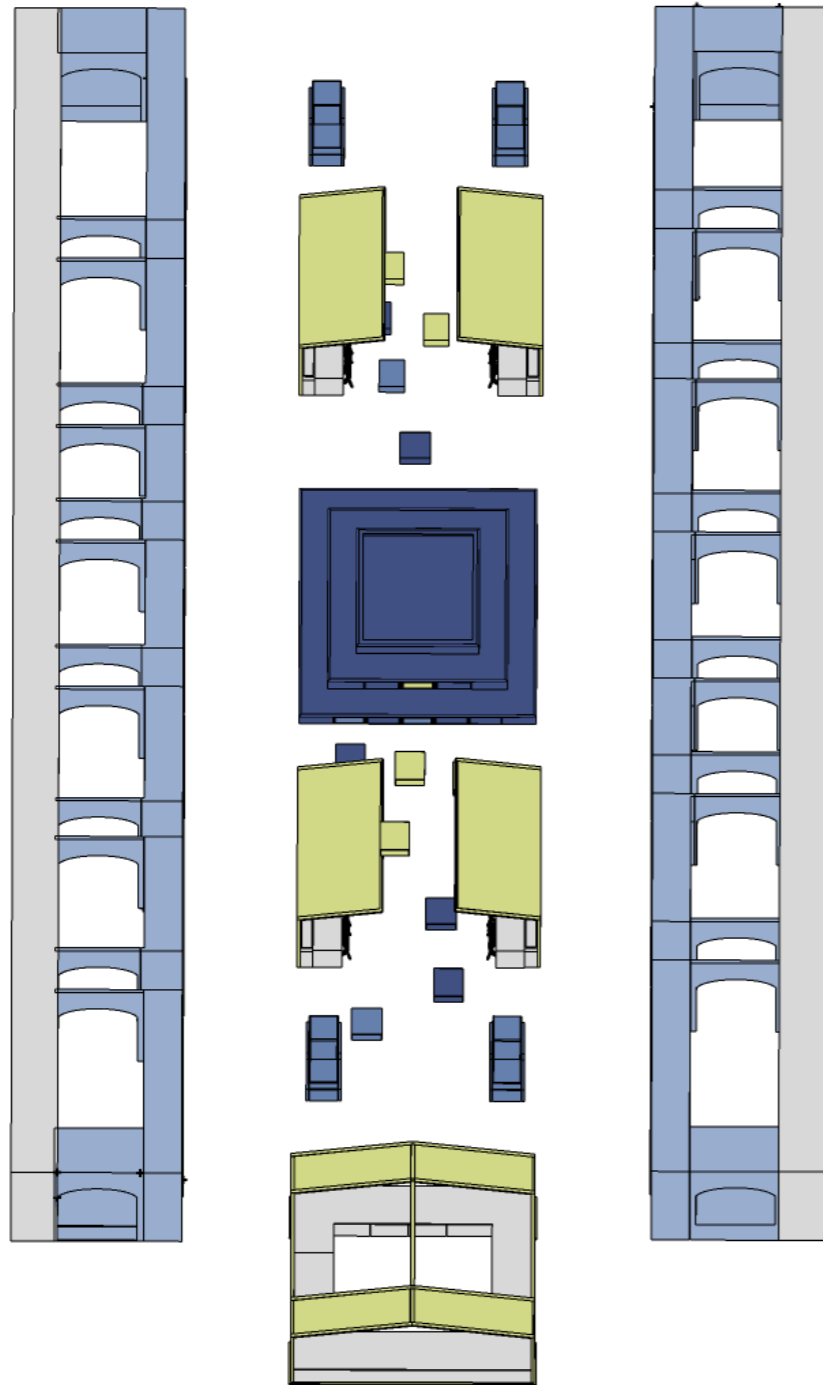
Sitting elements are clean and simple furniture, creating a coherent style with other furniture.

7.5.2.3 Scenarios



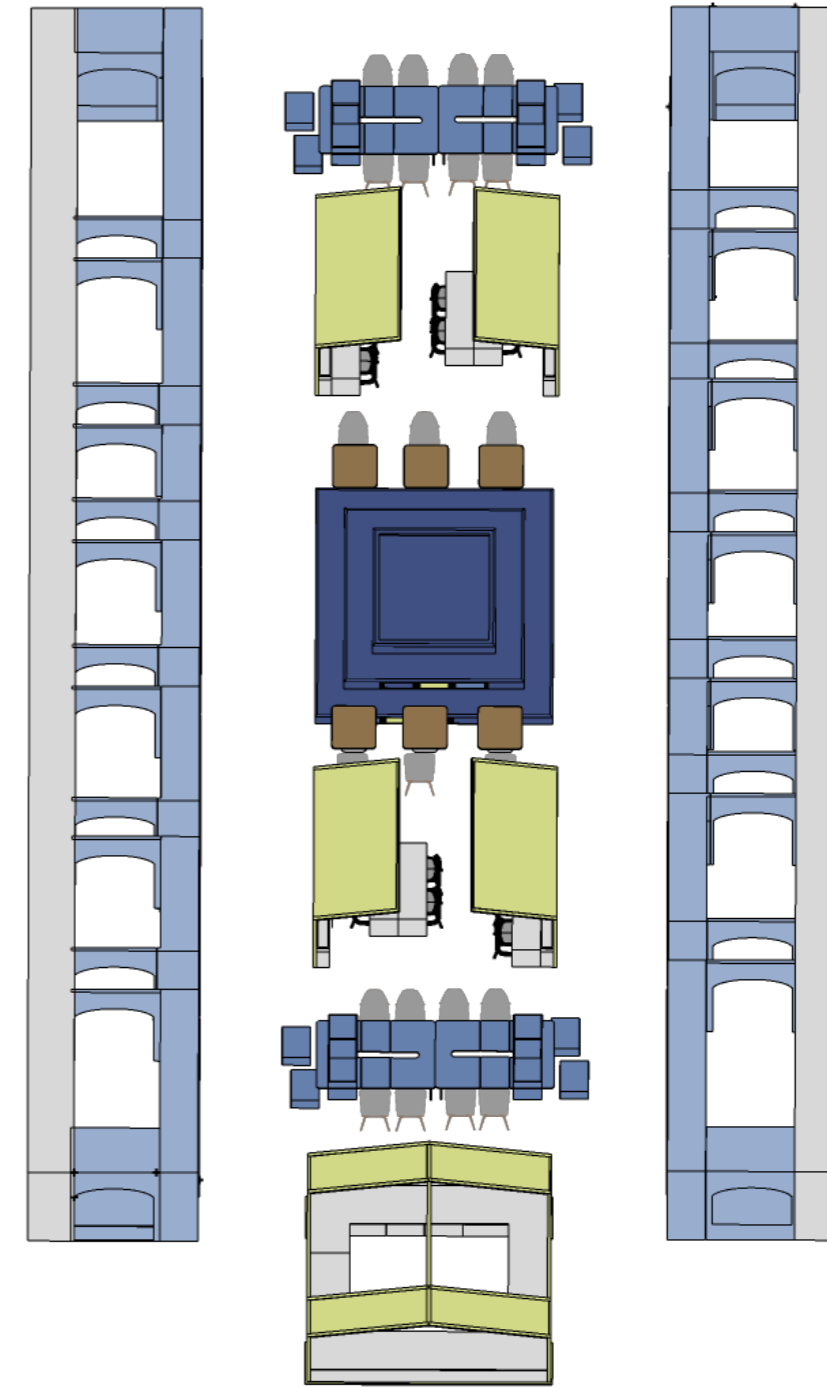
9am-12am
3pm-6pm

In the morning, during the operational hours of the bazaar, the central area functions as a designated seating zone, offering a conducive space to congregate, relax, and engage.



1pm-3pm
6pm-11pm

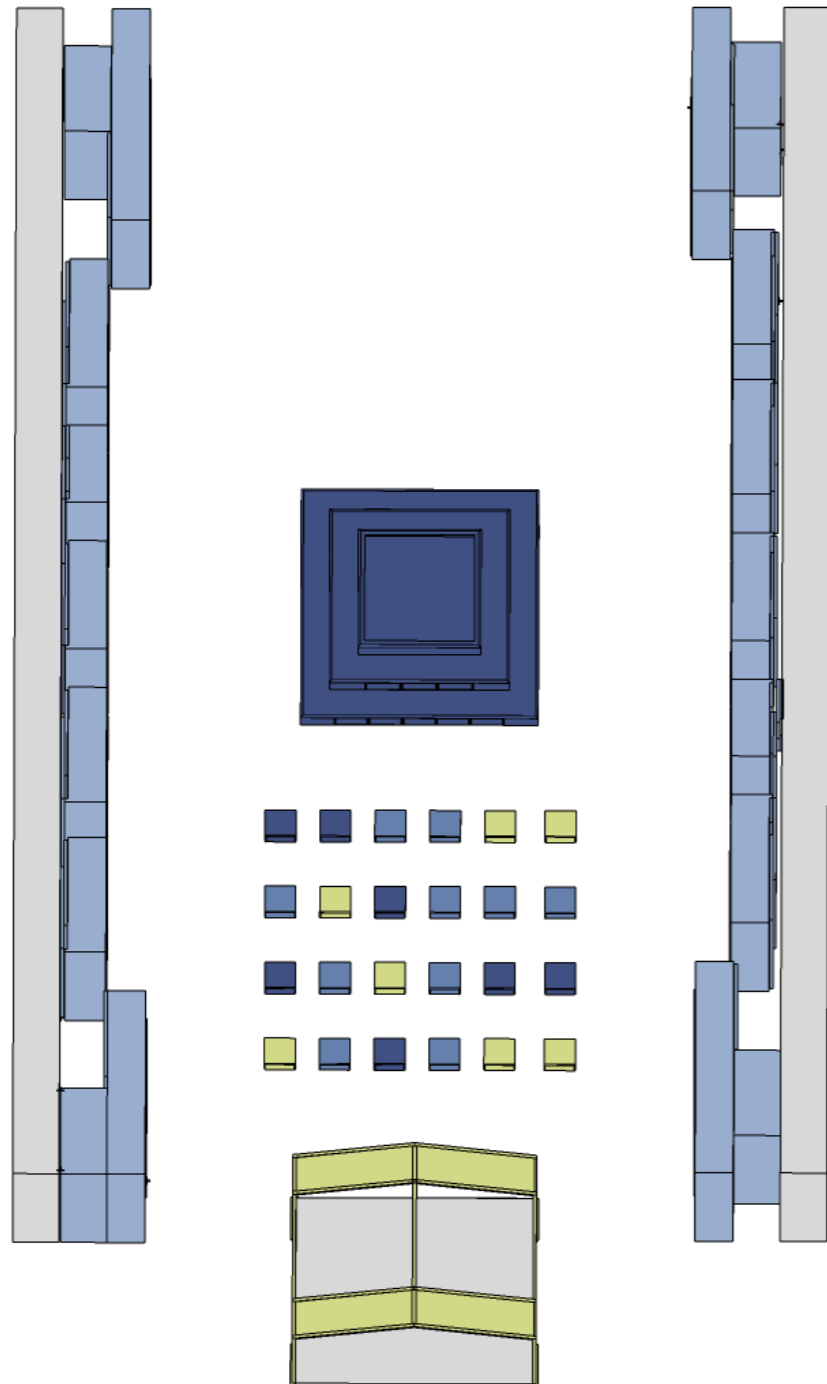
During lunchtime and evening, the area transforms into a restaurant, serving as an exclusive dining space for users.





Events

During events or special occasions, all furniture in the central area is removed, creating ample space for performances and accommodating the audience.

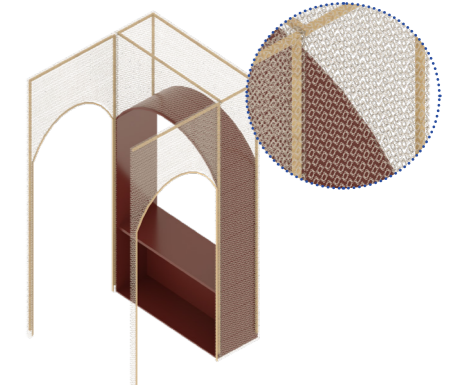


7.5.3 Spatial pattern

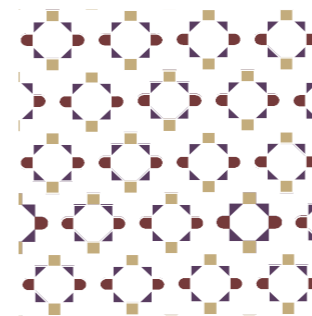
Material



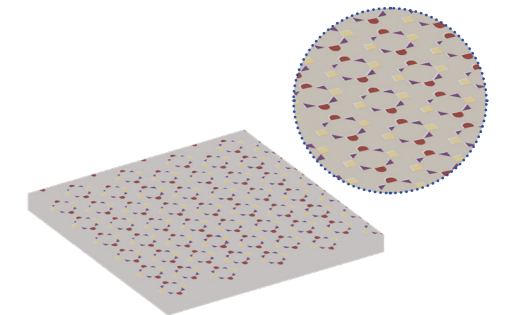
The minimized pattern with kharibulbul will be applied on furniture where transparency is prioritized, such as in bazaar stands or tents. The pattern is featured on metal or fabric.



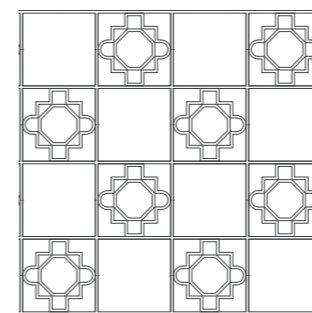
Graphical element



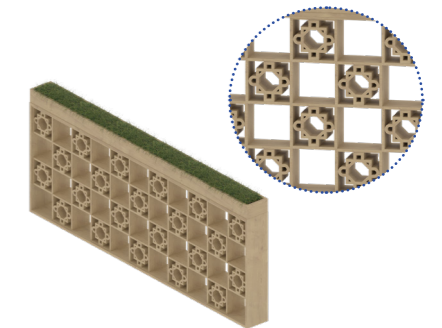
The colored, large-size pattern will be applied as a graphical element for the visual division of areas, for example, on corridors as a sticker.

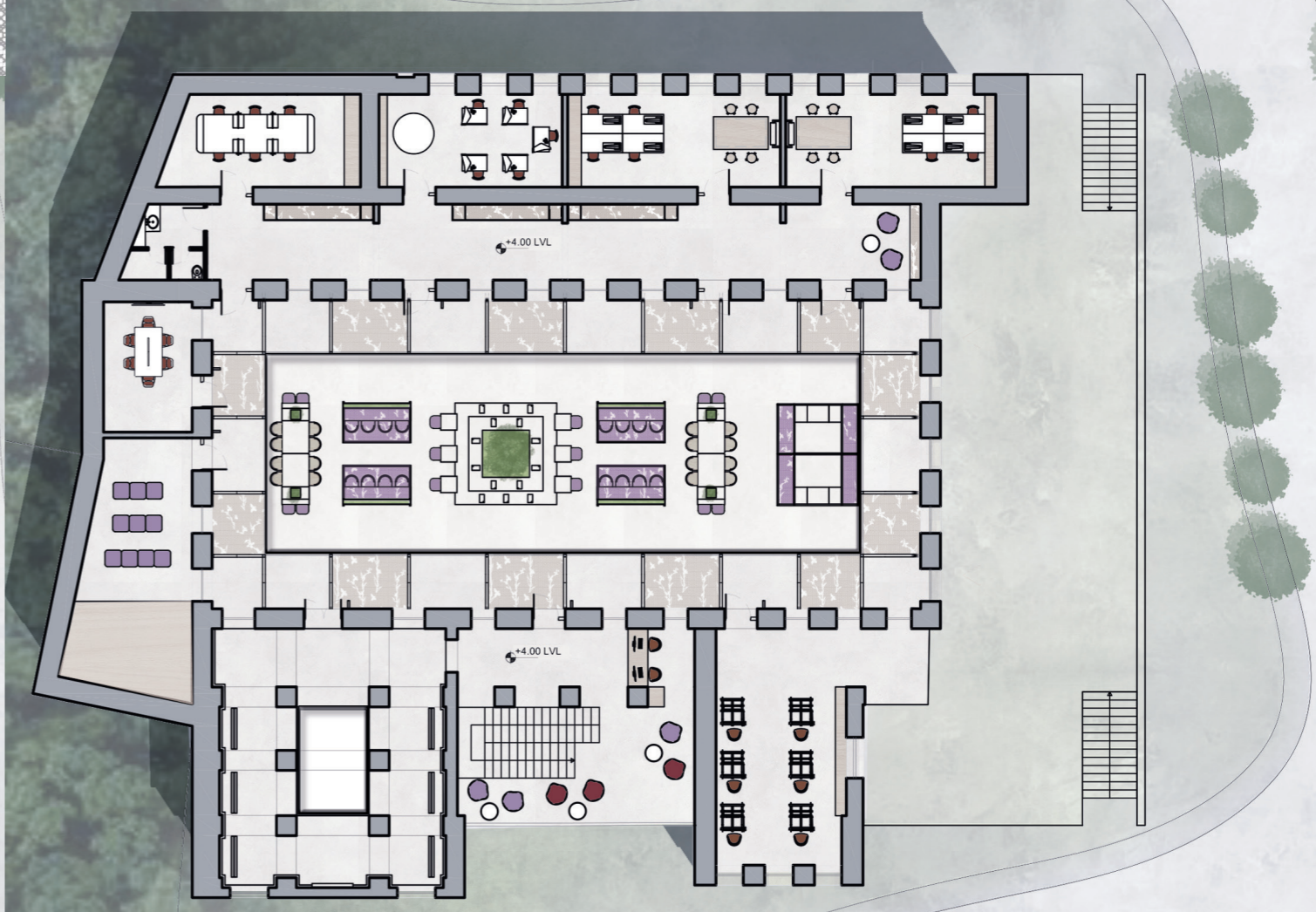


Furniture



The 3D version of the pattern will be used as a divider between zones, for example, between restaurant and bazaar railing. Divider is realized in wood.







Design implementation

8.1 General technical details

8.2 Structural elements and coverings

8.2.1 Preserved elements

8.2.2 Renovated elements

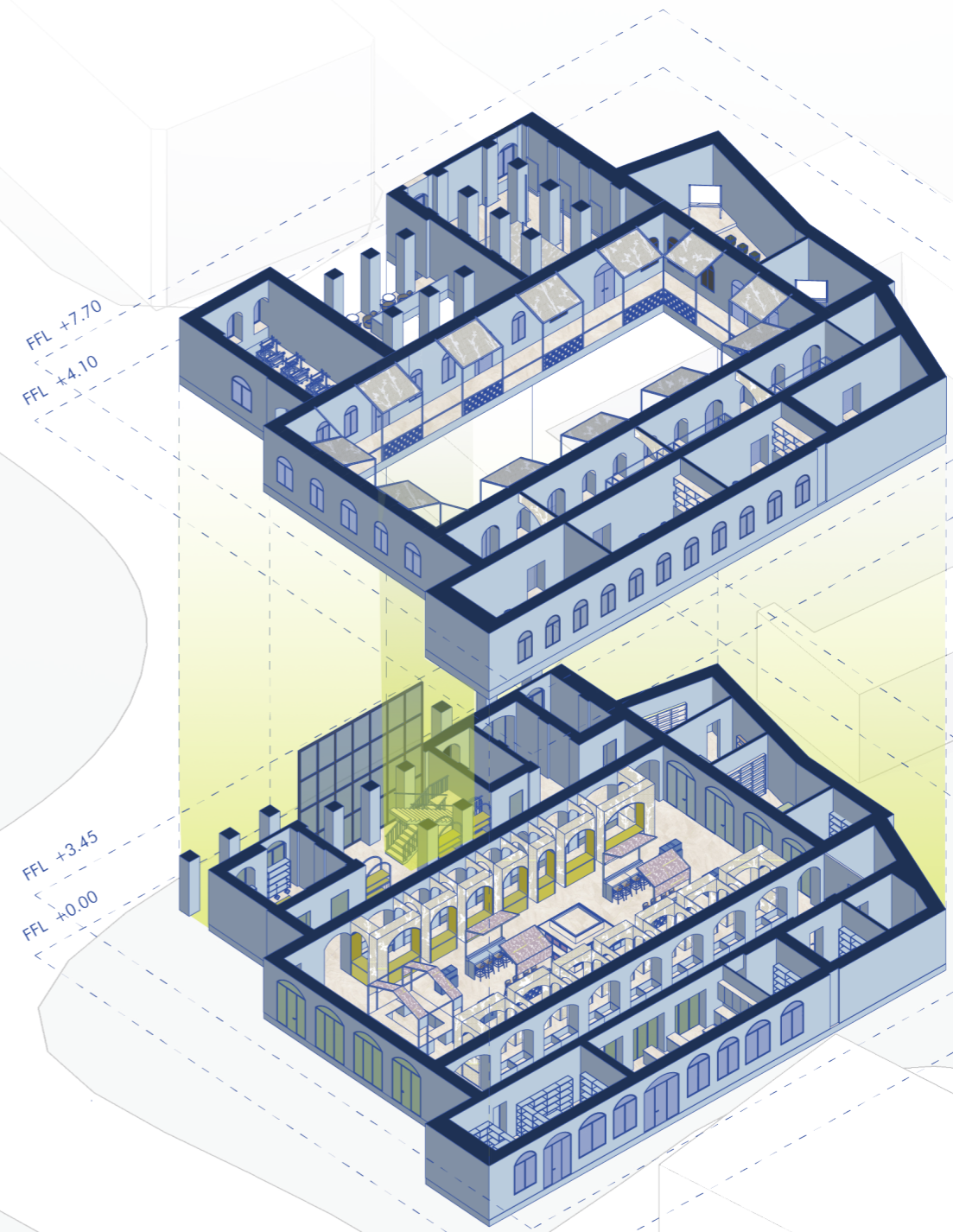
8.3 Furniture details

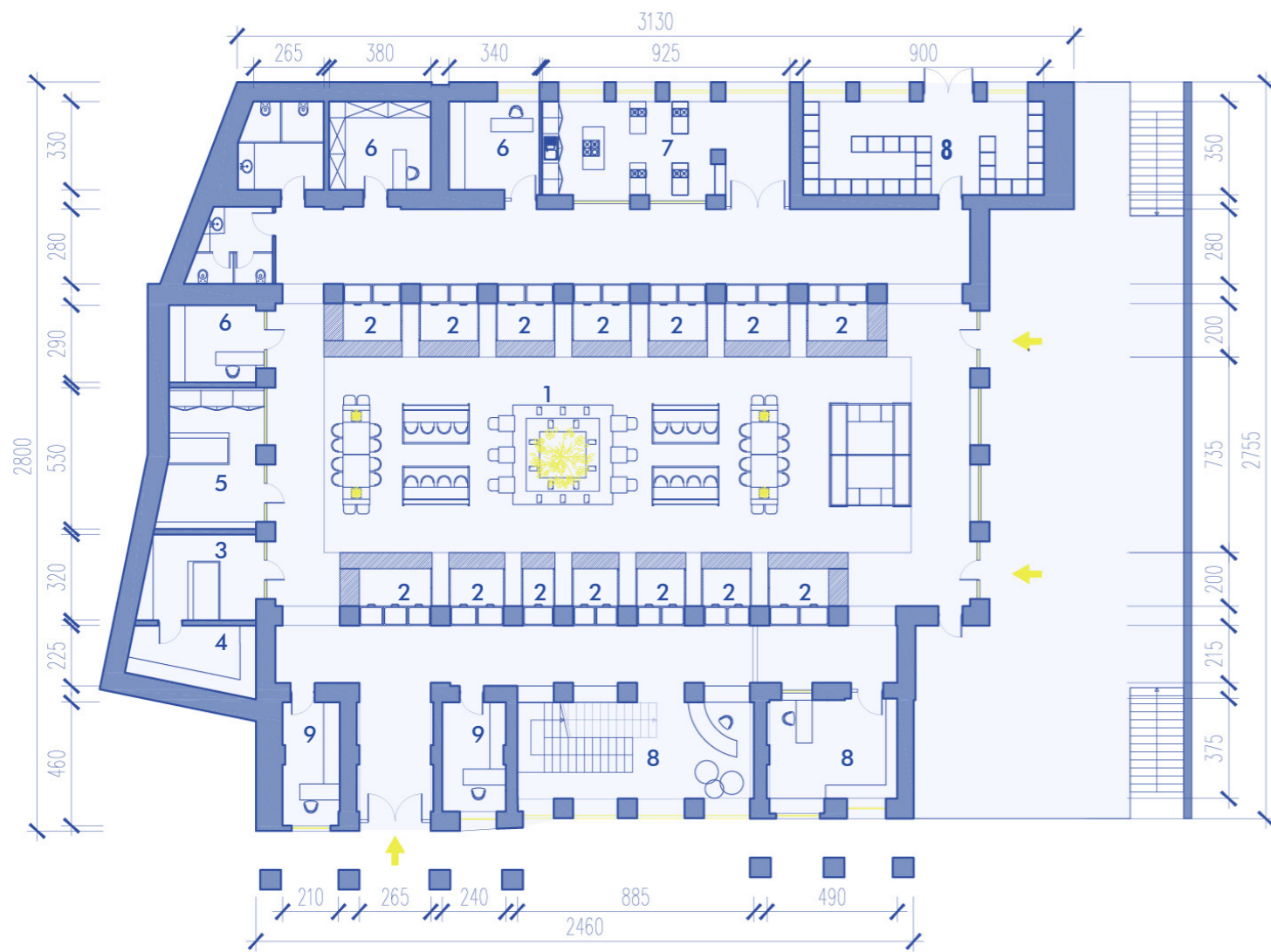
8.4 Areas



8.1 General technical details

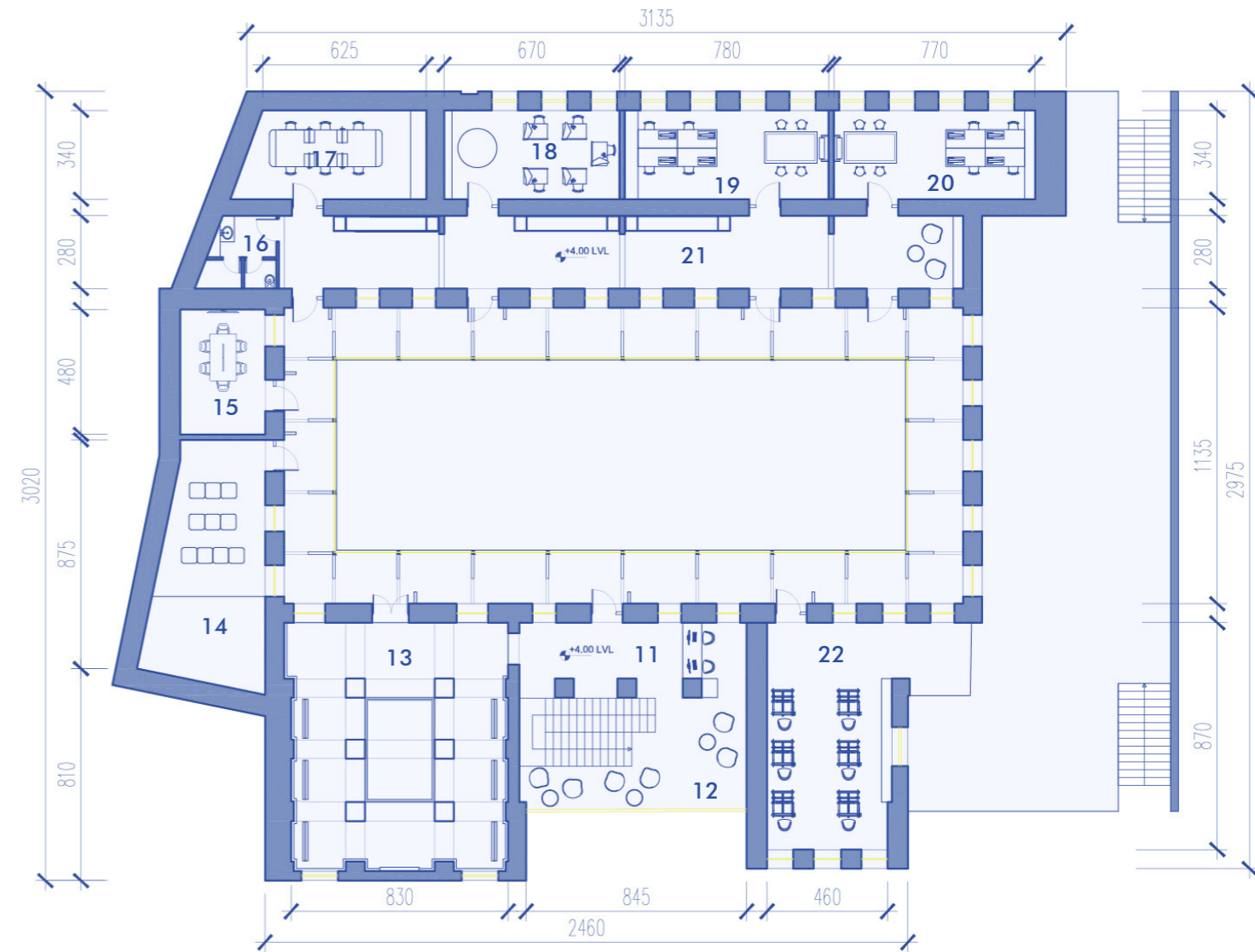
The building's axonometric view exhibits the structure's overall form and spatial relationships, as well as its main components and design elements. The structure itself demonstrates contemporary architecture, characterized by a modern interpretation of the building's dominant elements, including arches, rectangular and triangular shapes, and natural materials such as white stone, wood, and patterns. The axonometric view permits us perceive the interaction and separation between various levels and the building's surrounding context.





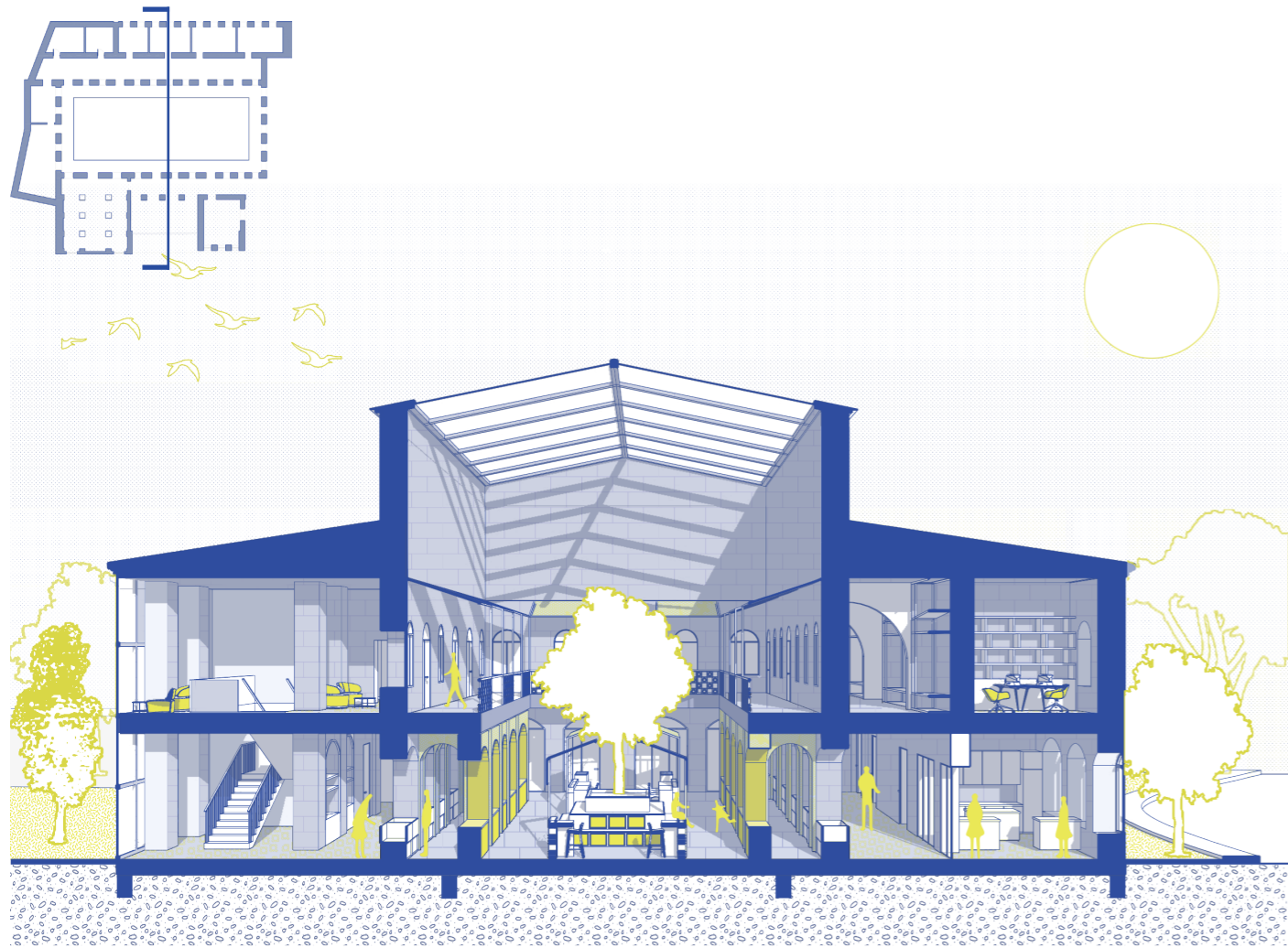
1ST FLOOR
672SQM

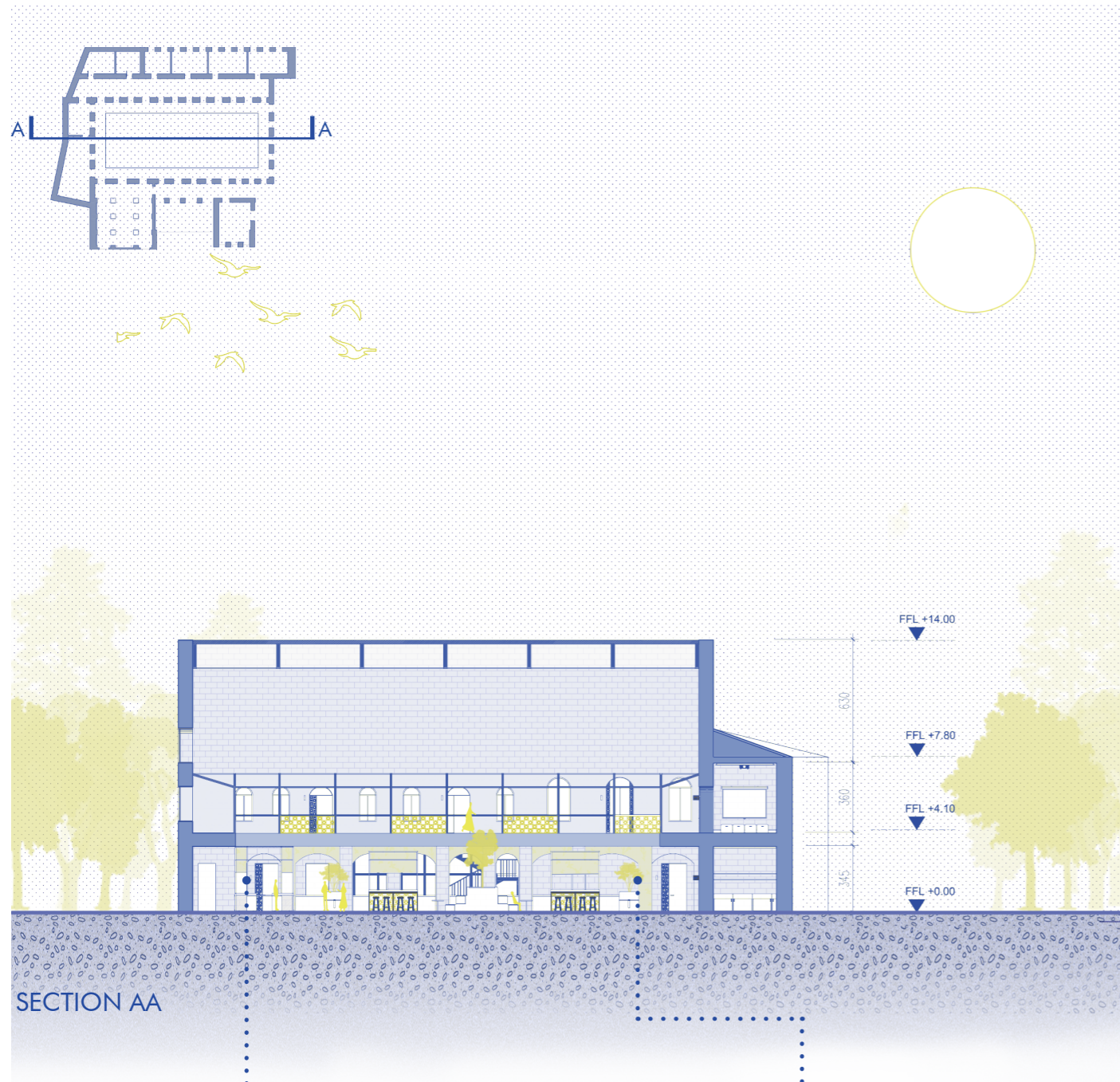
- 1. Restaurant
- 2. Farmer Stand
- 3. Meat area
- 4. Fridge
- 5. Fish area
- 6. Restaurant
- 7. Culinary workshop
- 8. Storage
- 9. Artisans shop
- 10. Souvenir shop



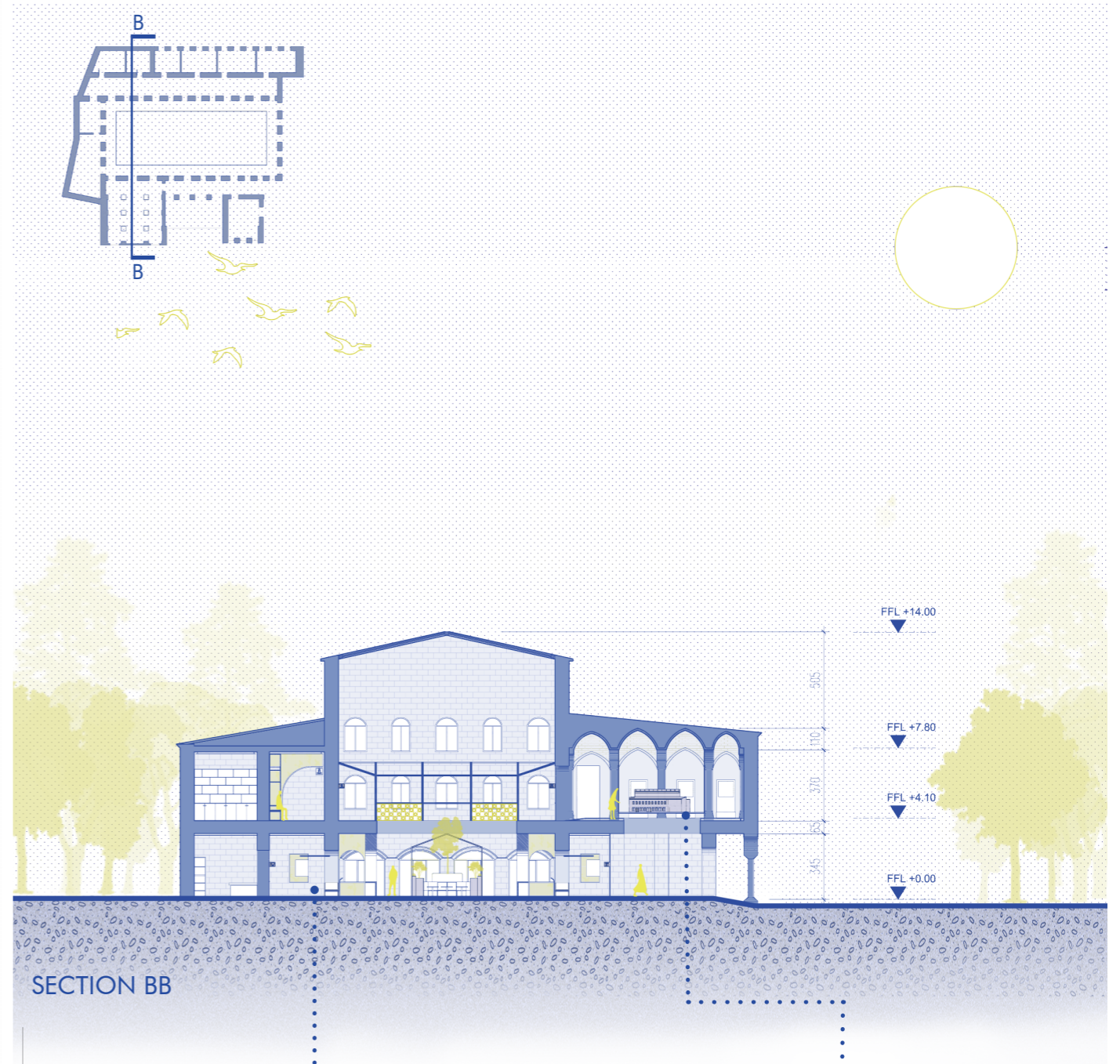
551SQM

- 11. Reception
- 12. Waiting area
- 13. Exhibition
- 14. Presentation area
- 15. Co-working area
- 16. WC
- 17. Musical instrument-making workshop
- 18. Pottery workshop
- 19. Kelaghayi-making workshop
- 20. Cap-making workshop
- 21. Resting area
- 22. Carpet-weaving masterclass

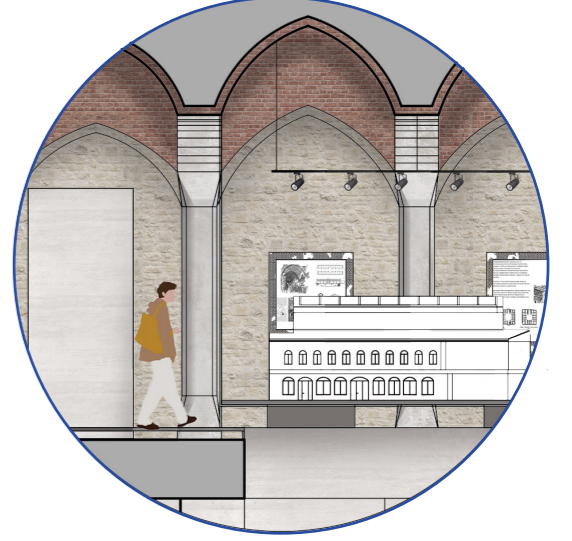




SECTION AA



SECTION BB



8.2 Structural elements

8.2.1 Preserved elements



White stone wall covering



Dome and columns of mosque



Arches



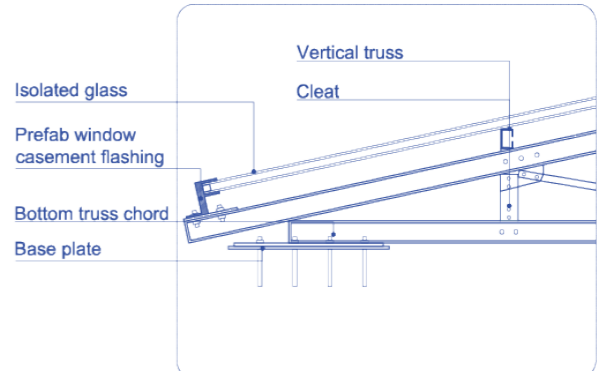
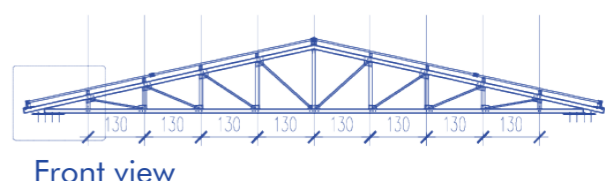
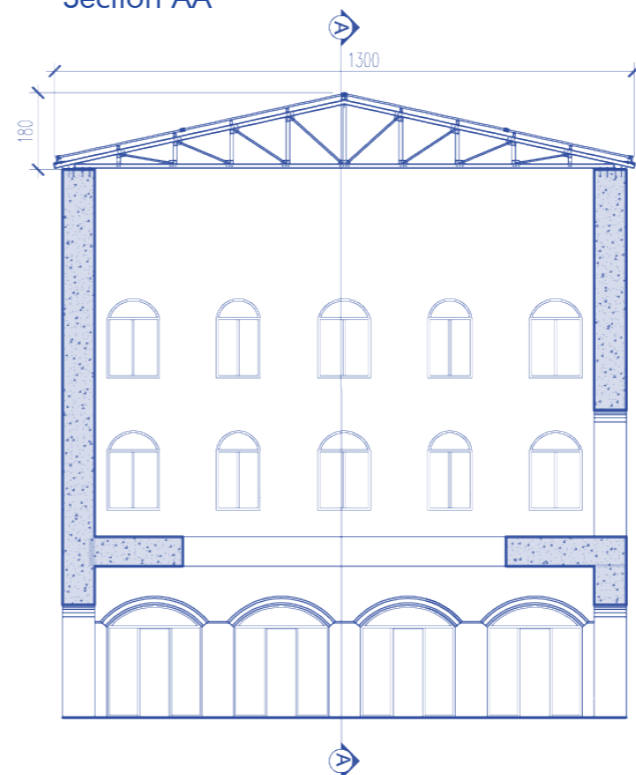
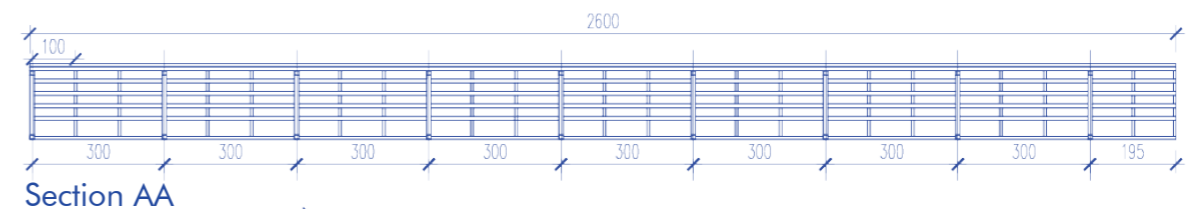
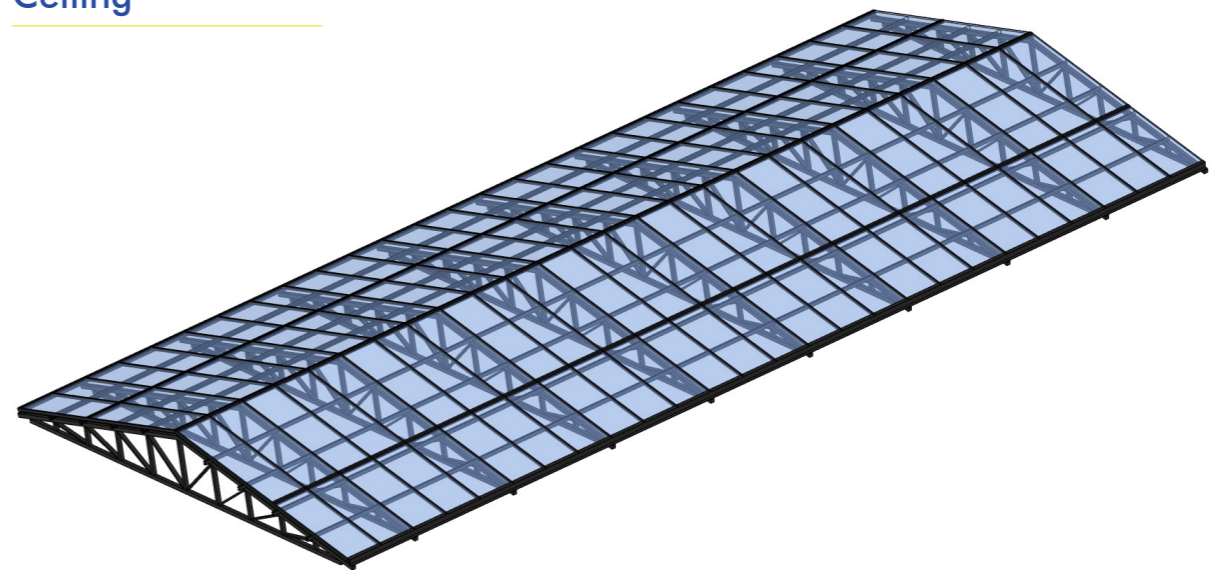
Building shape

The architectural integrity of the mosque was upheld through the preservation and prominent display of its dominant elements, such as white stone wall coverings, domes, columns, arches, and the overall structural form. Numerous methods, such as wall-washing lighting,

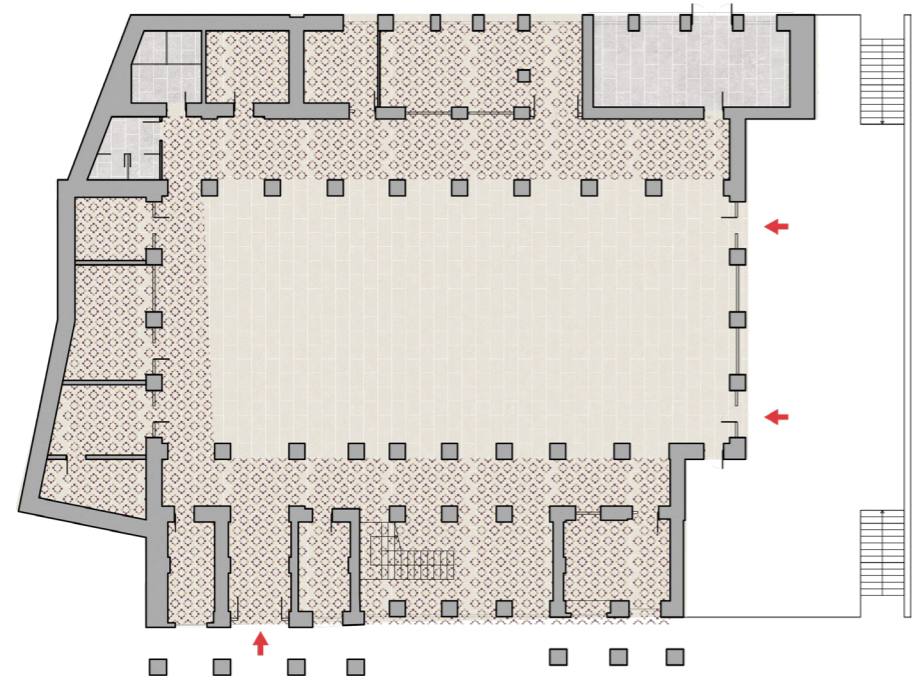
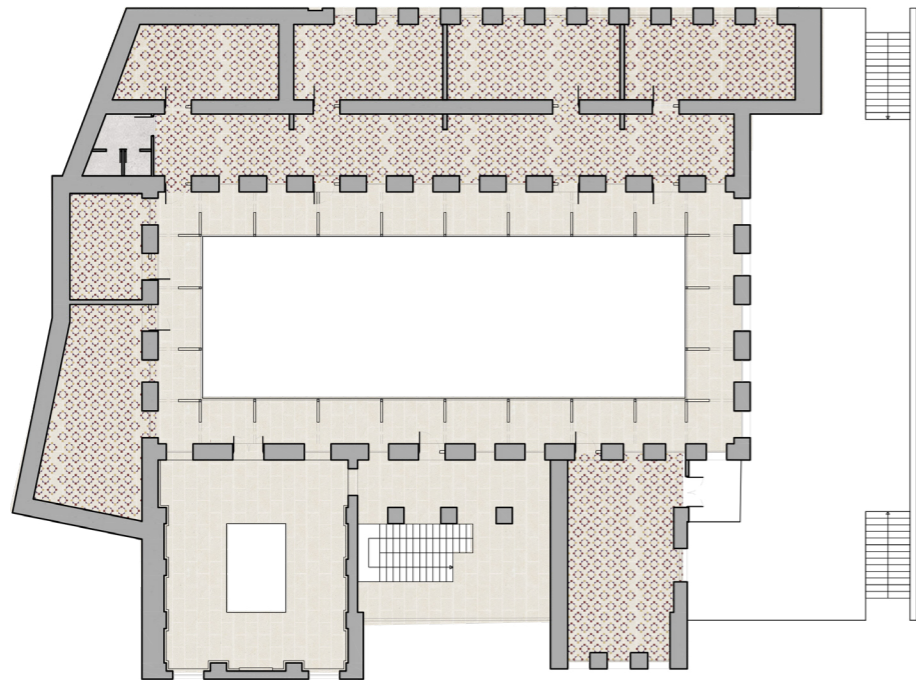
spotlights, and other artistic interventions, were used to achieve this. While seamlessly integrating any new pieces added to the structure, these interventions seek to highlight and attract attention to the existing architectural elements.

8.2.2 Renovated elements

Ceiling



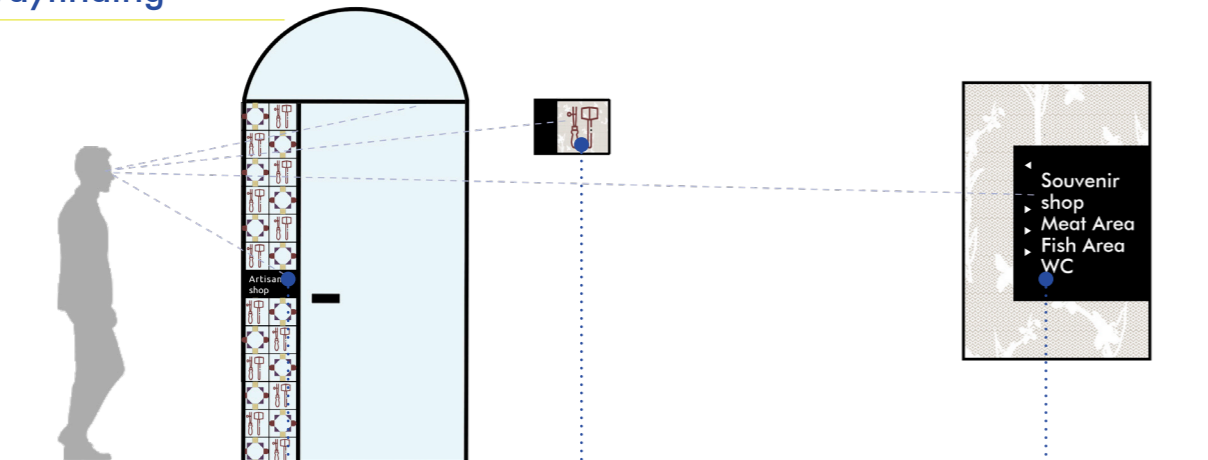
Floor covering details



Pattern sticker covering on tile Limestone Tiles



Wayfinding



Close reading

In depth reading of the detailed information from 1m

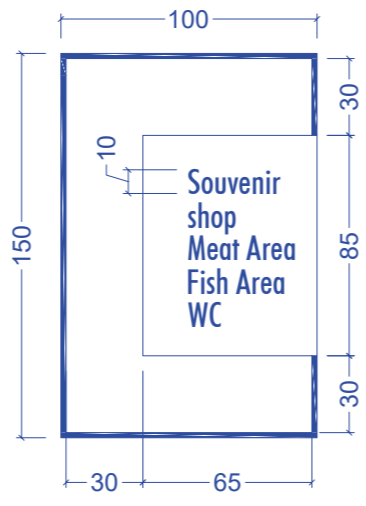
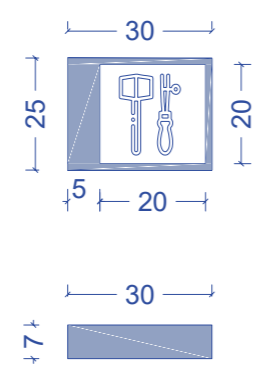
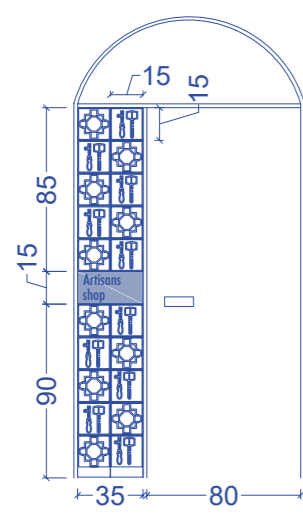
Quick reading

Comprehension of the most important information from 2,5 m

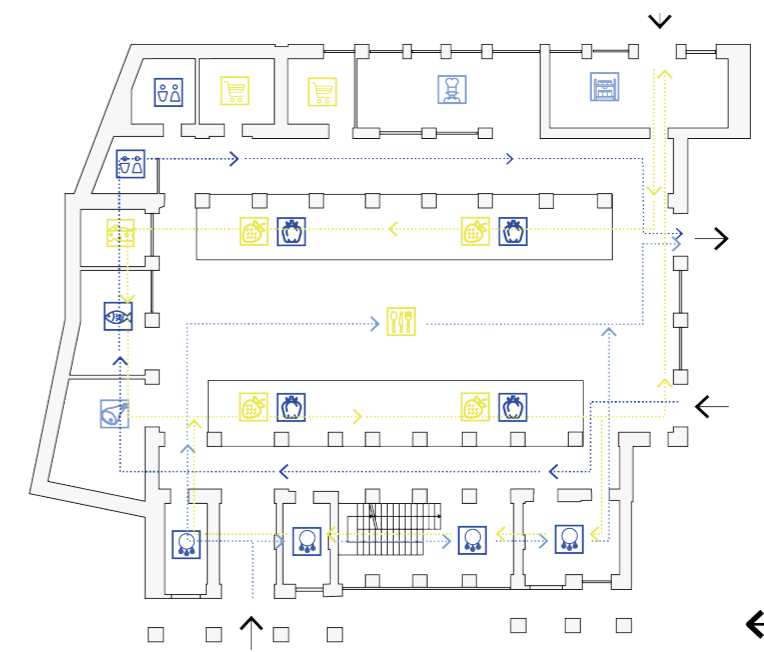
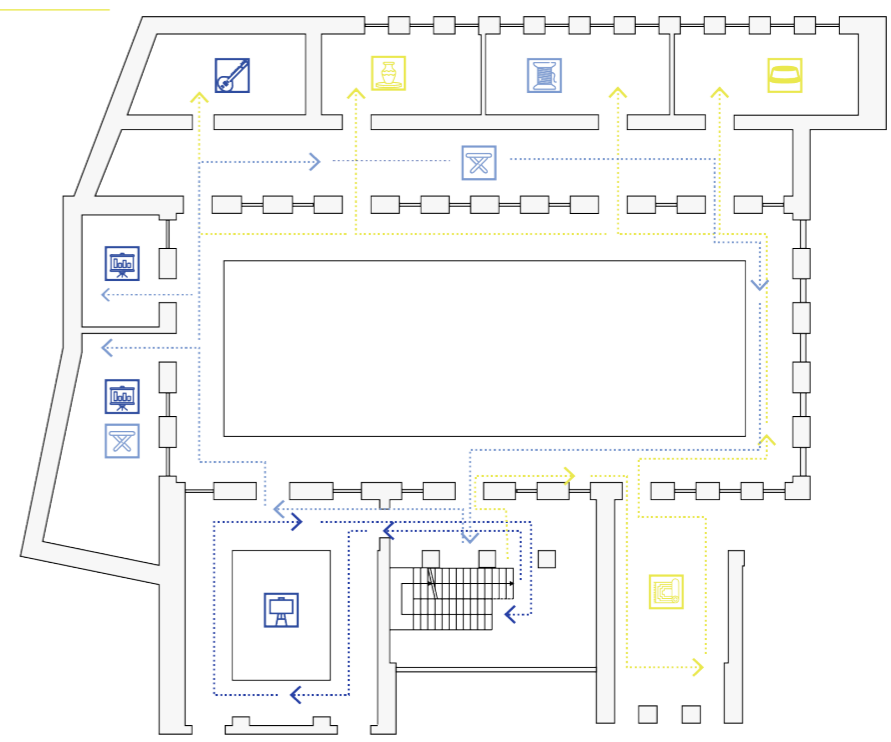
Quick reading

The sign and its function are recognized from 25m

- Souvenir shop
- Presentation room
- Culinary masterclass
- Khalaghayi masterclass
- Pottery masterclass
- Cheese shop
- Fish area
- Resting area
- Fruit area
- Meat area
- Cap making
- Carpet-weaving
- Exhibition
- Storage
- WC
- Music instruments
- Restaurant
- Vegetable area



User flow



← - - - - Local

← - - - - Newcomer/visitor

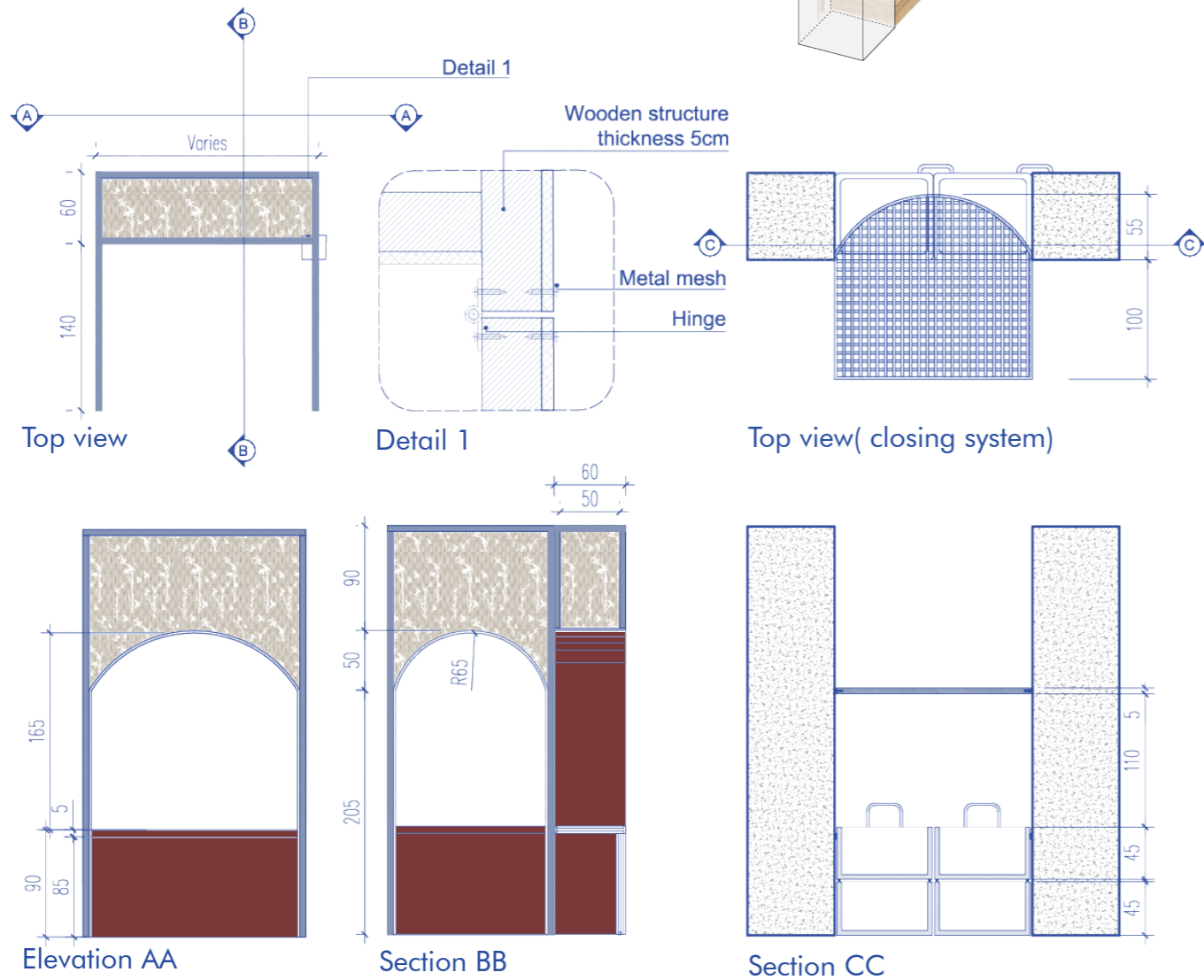
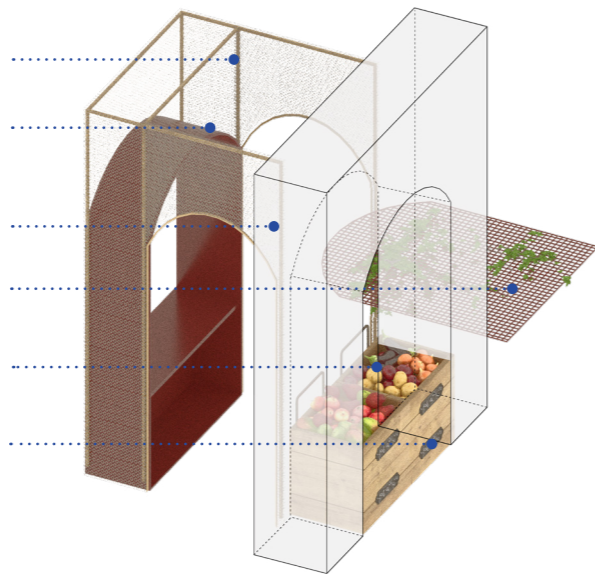
← - - - - Participant visitor

← Entrances

8.3 Furniture

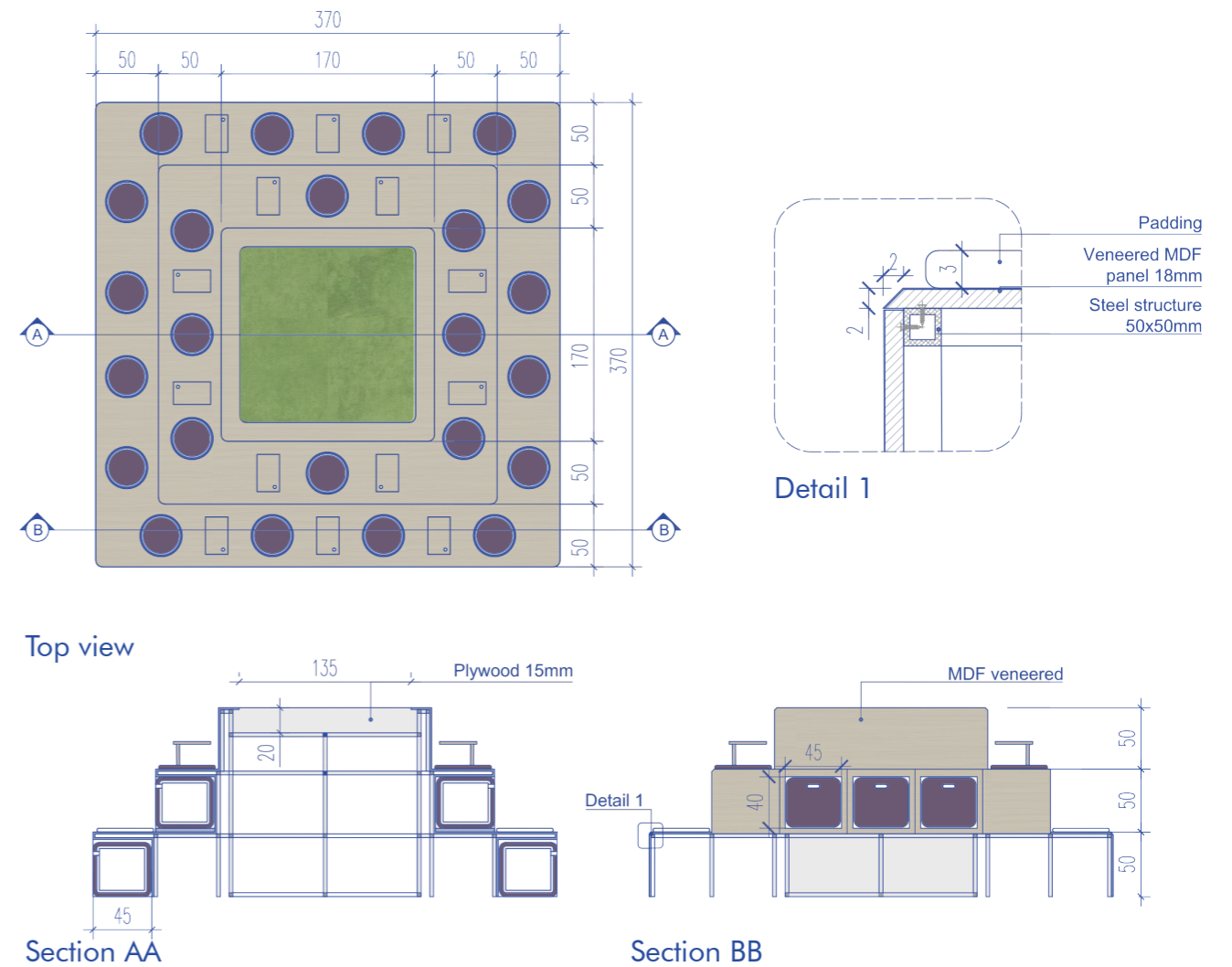
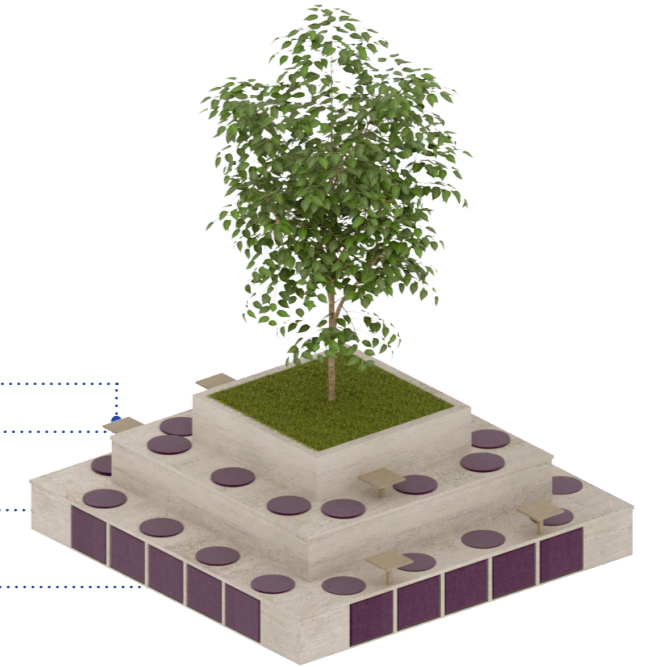
Bazaar

- Wooden frame structure
- Metal mesh
- Painted MDF 18mm
- Closing system
- Painted MDF 18mm
- Pull out trolley metal tube D=2cm
- Display boxes fabricated in wood



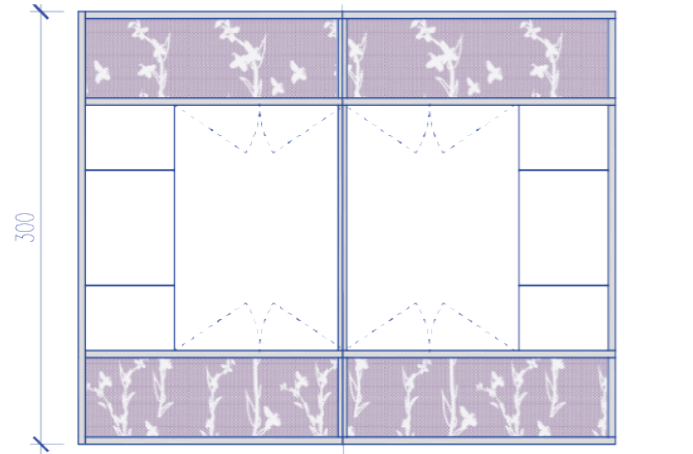
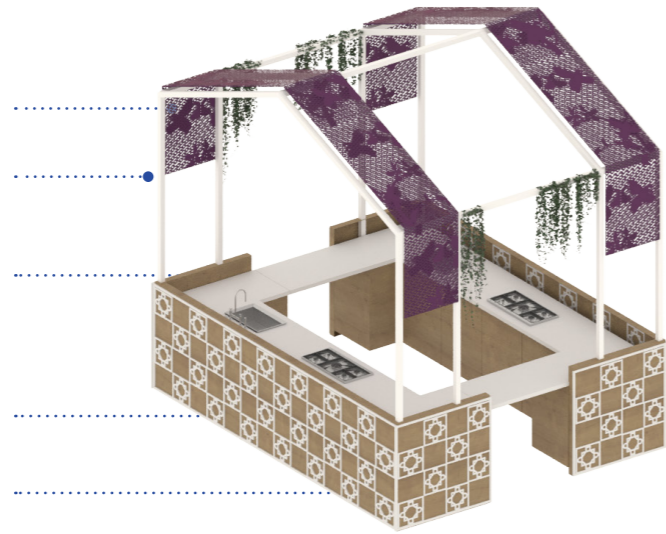
Central sitting

- Wooden frame structure
- Plant pot
- Wooden structure
- Poufs

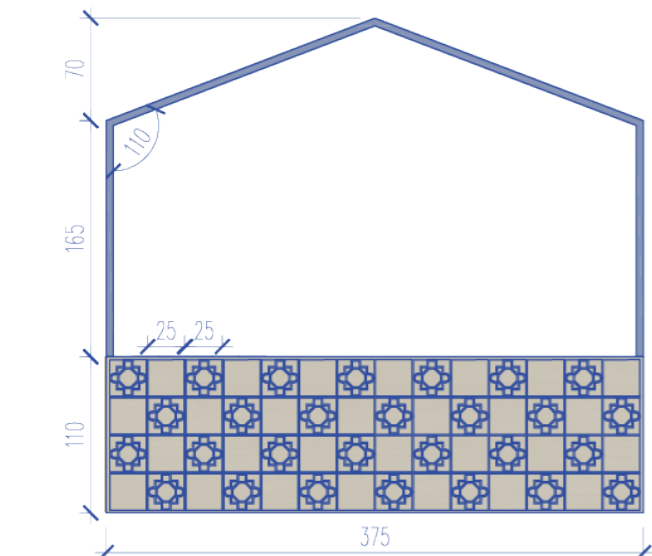


Kitchen

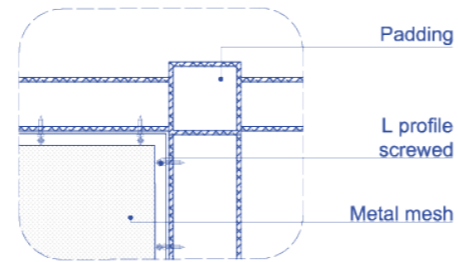
- Metal mesh
- Metal structure
- Movable kitchen furniture on wheels
- Pull out trolley metal tube D=2cm
- Wooden structure covered with veneered MDF



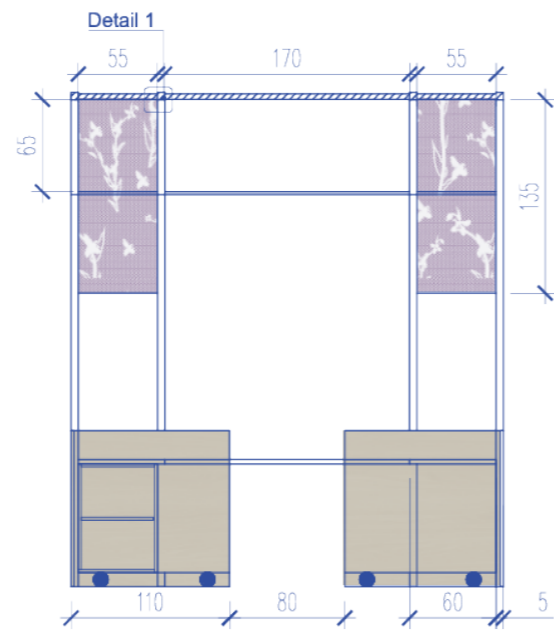
Top view



Elevation AA



Detail 1



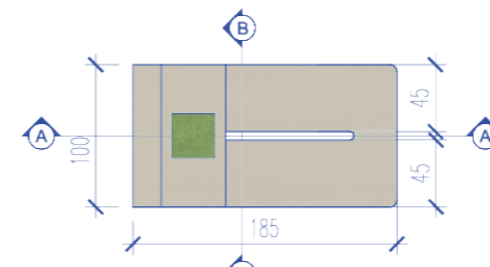
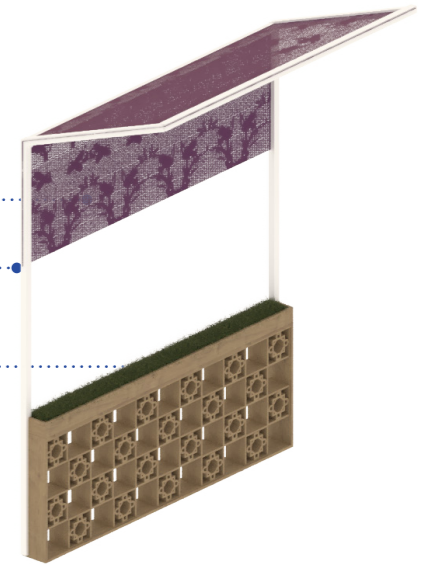
Section BB

Table

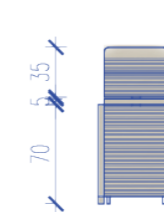


Wooden structure covered with veneered MDF

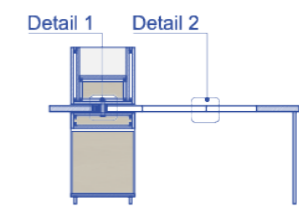
- Metal mesh
- Metal structure
- Wooden panel 15cm thickness



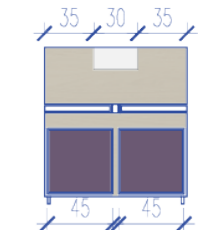
Top view



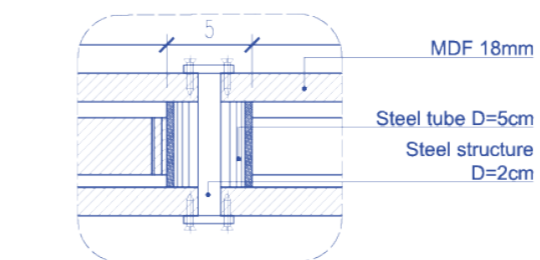
Elevation



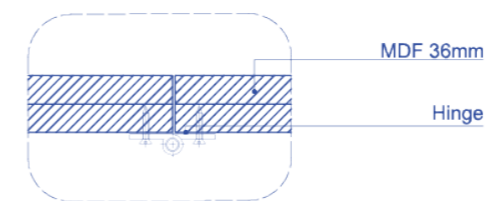
Section AA



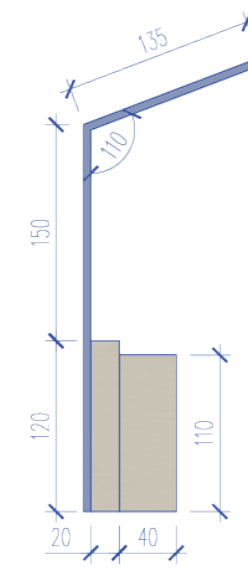
Section BB



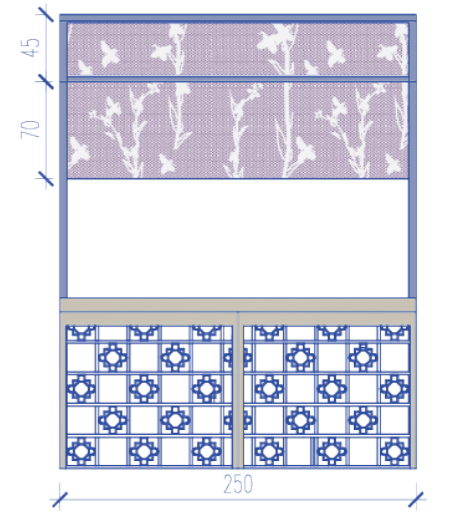
Detail 1



Detail 2



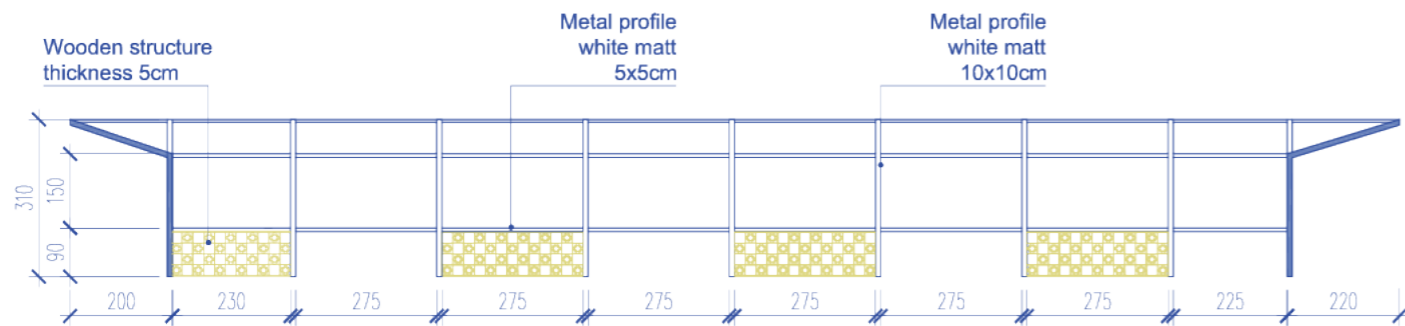
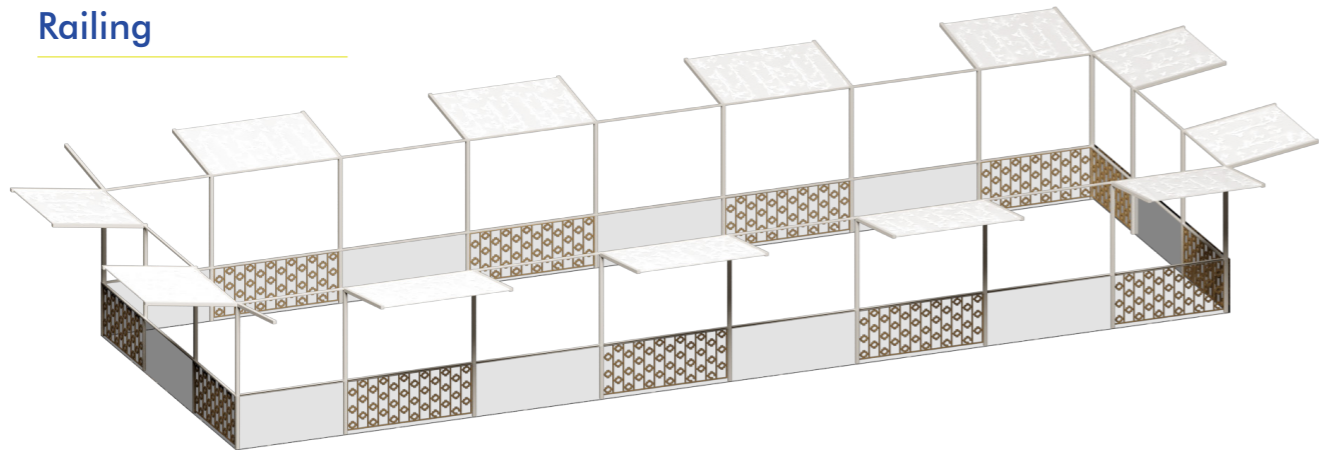
Left view



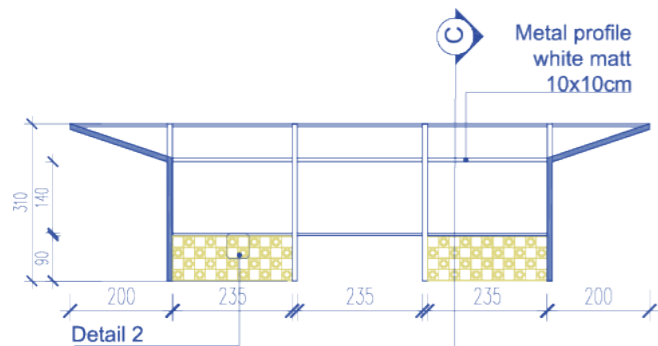
Front view



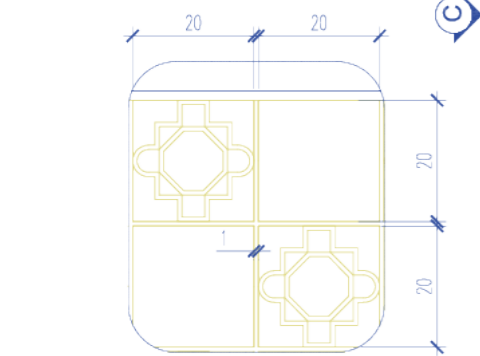
Railing



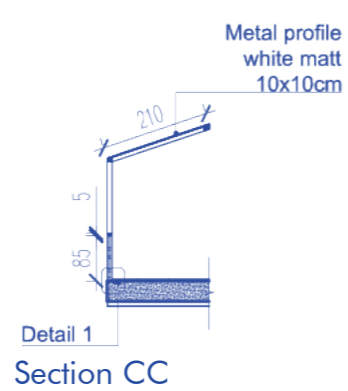
Front view



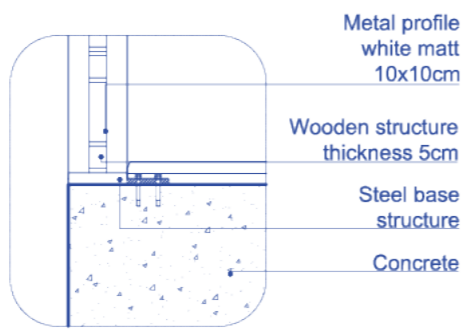
Left view



Detail 2



Detail 1
Section CC



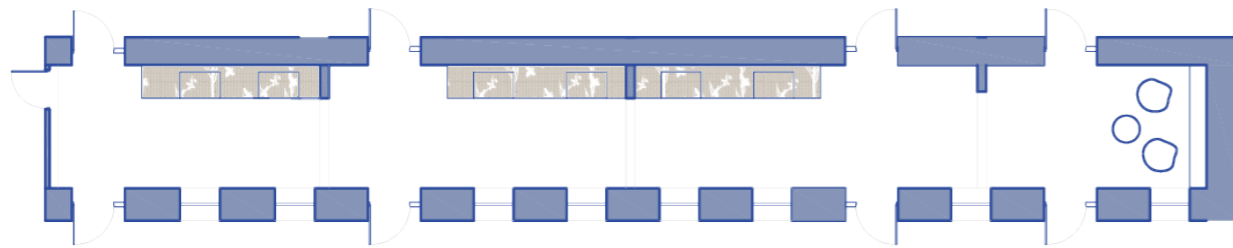
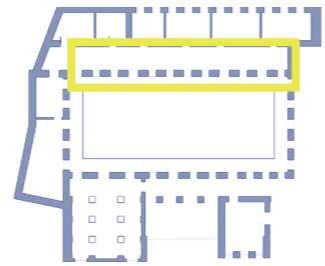
Detail 1



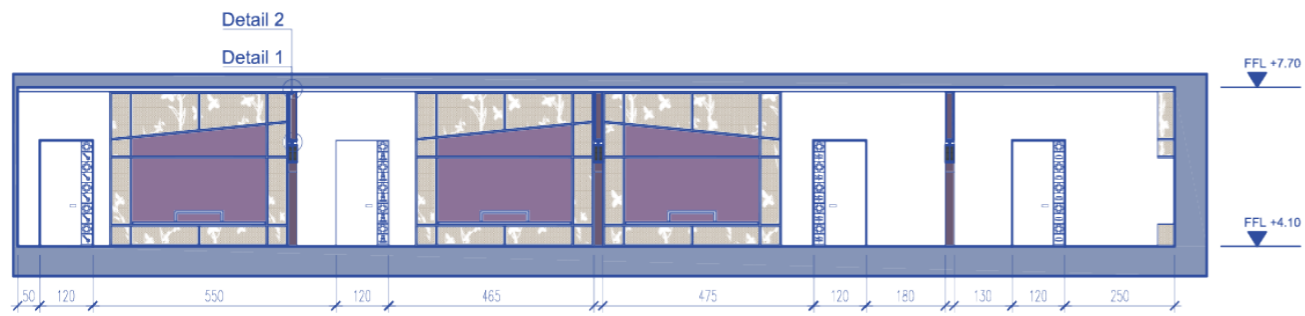
Master Thesis / Gunay Babayeva

8.4 Areas

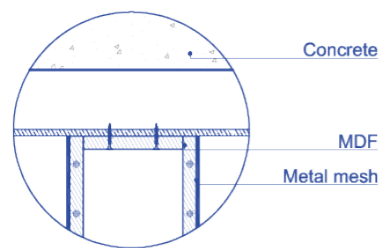
Resting area



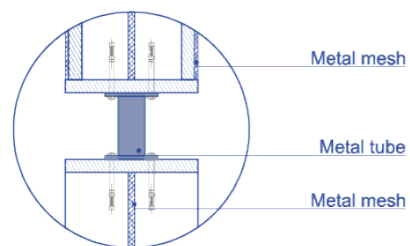
Top view



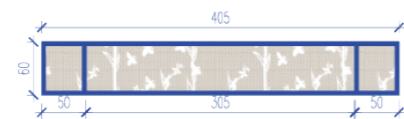
Front view



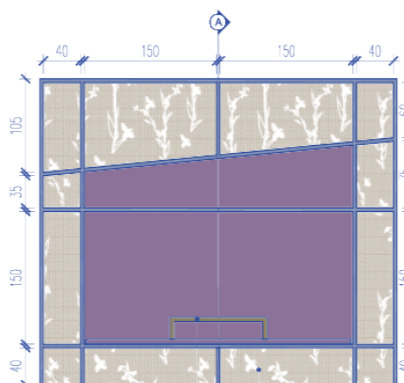
Detail 2



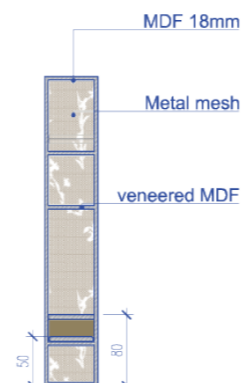
Detail 1



Top view

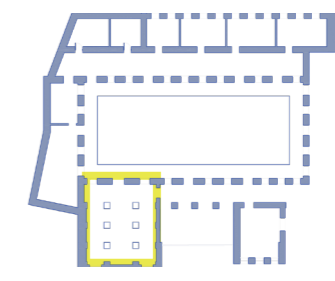


Front view

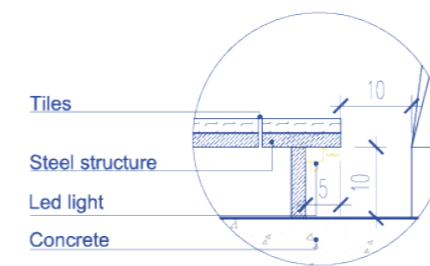
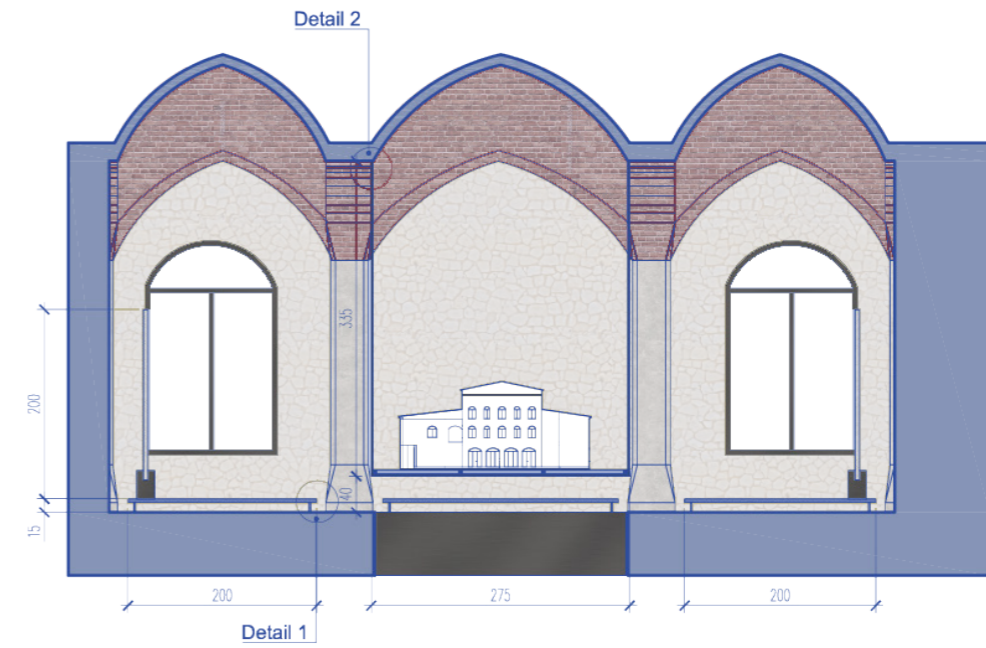


Section AA

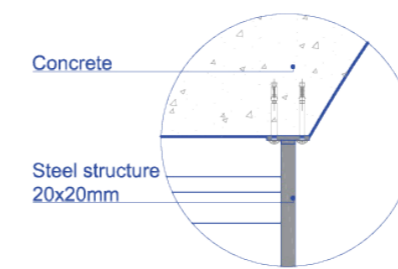




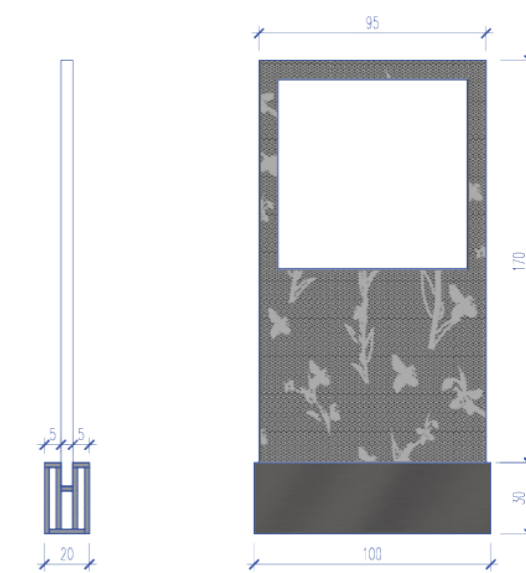
Exhibition area



Detail 1



Detail 2



Front view

Bibliography

- Abdulameer, Z.A.; Abbas, S.S. Adaptive reuse as an approach to sustainability. IOP Conf. Series Mater. Sci. Eng. 2020. Administrative Department of the President of the Republic of Azerbaijan. Handicraft. 2012. Available at: chrome-extension://efaidnbmnnnibpcajpc-gclefindmkaj/https://files.preslib.az/projects/shusha/en/b4.pdf
- Akakishiyeva, R. Karabakh- ancient land of Azerbaijan. 2021. Available at: science.gov.az/az/news/open/18154
- Altman, I. and Serha M. Place Attachmennt.1992.
- Antonish, M. Identity and place. 2018. Online article available at: academia.edu/8144547/Identity_and_Place_a_bibliography
- Arab Architecture. The impact of war on architecture. 2022. Online article available at: https://archup.net/the-impact-of-war-on-architecture/
- Attiwill, S. Working space: Interiors as provisional compositions. In occupation: Negotiations with Constructed space. Conference Proceedings University of Brighton. 2009.
- Auclair,E.,& Fairclough, G. Theory and practice in heritage and sustainability: Between past and future. 2015.
- Azerbaijan community of Nagorno-Kharabakh region of Azerbaijan Republic. Shusha is a city of historical, cultural and strategic importance. Available at: karabakh.az/news/613
- Azerbaijan National Commission for UNESCO. Shusha historical and architectural reserve. 2001 . Available at: whc.unesco.org/en/tentativelists/1574/
- Azerbaijans. The ancient caravanserais of Azerbaijan. updated 2021. Available at:azerbaijans.com/content_1773_en.html
- Azertac. Caravanserais of Shusha fortress. 2021. Available at: azertag.az/xeber/Susa_qalasinin_karavansaralari-1742995
- Bartle, P. What is community? A sociological perspective. 2010. Online article available at: edadm821.files.wordpress.com/2010/11/what-is-community.pdf
- BBC. Nagorno-Karabakh conflict, respond to 8 questions. 2020. Available at: bbc.com/azeri/azerbaijan-54456742
- Bernard B. Il secolo dei genocidi. Il Mulino. 2006 .
- Bevan, R. The Destruction of Memory: Architectural and Cultural Warfare. 2004
- Bevan, R. Destruction of Memory: Architecture at War. 2006.
- Brooker & Stone . 2010b. 2010. p. 46.
- Buhalis, D., & Jun, S. H. E-tourism. Contemporary tourism reviews. 2011. p. 1, 2-38.
- Cantacuzino, S. New uses for old buildings; Kidney, W. Working places: the Adaptive use of Industrial buildings. 1976.
- Council of Europe.The Faro Convention: the way forward with heritage. 2020. Online article available at: edoc.coe.int/en/cultural-heritage/8757-the-faro-convention-the-way-forward-with-heritage.html
- Cunnington, P. Change of Use: The Conversion of Old Buildings. 1988.
- Dario, G. World Heritage: Shield or Target? Online article available at: getty.edu
- Dickinson, D. Adaptive Reuse is the Architectural challenge of the future. 2022 . Article available at: commonedge.org
- Douglas, G. Do-It-Yourself urban design: The social practice of informal “improvement” through unauthorized alteration. City & Community. 2013. p. 5–25
- Elena, G. Placemaker. Gli inventori dei luoghi che abitiamo. 2021.
- Embassy of AR in Iran. 24th anniversary of the occupation of Shusha. 2016. Online article available at: tehran.mfa.gov.az/en/news/3085/24th-anniversary-of-occupation-of-shusha
- Eyerman, R. The past in the present culture and transmission of the memory. 2004.
- Foster, G. Circular economy strategies for adaptive reuse of cultural heritage buildings for reducing environmental impacts. 2020. p. 152.
- Gajar, Ch.Old Shusha.2007. p. 122.
- Gen Prosecutor of AR. The 44-day Patriotic war. Available at: genprosecutor.gov.az
- Giglietto,D. et. al. Bridging cultural heritage and communities through digital technologies: Understanding perspectives and challenges. 2021. Online article available at: researchgate.net
- Glass,R. Aspects of Change.1964
- Goerner,S.G. Today’s Copernican flip: How putting collaborative learning at the hub of human evolution our chances of survival. 2007. p. 481-491.
- Gosling, J.; Sassi, P.; Naim, M.; Lark, R. Adaptable buildings: A systems approach. Sustain. Cities Soc. 2013. p.7, 44–51.
- Graeme, B. Adaptation strategies of interior architecture and design. 2017.
- Halbwachs, M. On Collective Memory. 1992. Jeffrey, K.O., Robbins, J. Social Memory Studies: From “Collective Memory” to the Historical Sociology of Mnemonic Practices. 1999. Available at:jstor.org/stable/223476?seq=33
- Hollander et al.Planning Shrinking Cities. 2009.
- Hoteit,A. War against architecture , identity and collective memory. 2015. Online article available at: researchgate.net
- ICCROM Conservation Studies 6. Cultural Heritage in Post-war recovery. p. 44-45
- Jacobs J., The Death and Life of Great American cities: the Failure of Town Planning. 1961.
- Karabakh Center. Nagorno-Karabakh in Administrative-territorial structure of Azerbaijan.Available at: story.karabakh.center/en/nagorno-karabakh-in-administrative-territorial-structure-of-azerbaijan
- Karabakh. Refugees and IDPs in Azerbaijan. Available at: karabakh.org/conflict/refugees-idps/general-info/
- Karana, S. Two-story caravanserai. Available at: map.virtualkarabakh.az/monument.php?ID=106
- Kathleen, K. Architecture at the turn of the 21st century. 2013. Online article available at: britannica.com/art/picturesque
- Khaled, I. N. Ahmed. Reuse of Demolished Building’s Debris in Post-war Construction. 2007. Online article available at: khalednabil.net/papers/PostwarConstruction2007.

- pdf
- Langston, C.A. Green adaptive reuse: Issues and strategies for the built environment. In *Modeling Risk Management in Sustainable Construction*. 2010. p. 199-209.
- Lanz, F. and Pendlebury, J. Adaptive reuse: a critical review. 2022.
- Layton, R., Thomas, J. Introduction: the destruction and conservation of cultural property. 2002. p. 1-21.
- Lingenauber, K. Post-war Green Spaces – Recent Restoration and Upgrading Projects in Berlin. 2020. p. 78. Available at: journals.ub.uni-heidelberg.de/index.php/icomoshefte/article/view/75100/68773
- Lmahamad, A. Azerbaijan's focus to future: Restoration of liberated lands. Available at: azeritimes.com
- Mammadli, N. Every neighborhood of a city calls history. 2022. Available at: medeniyyet.az/page/news/62049/Her-mehellesi-tarix-cagiran-seher.html
- Manzo, Lynne. C. Beyond house and haven: Toward a revisioning of emotional relationships with places. 2003. p. 47-61. Journal available at: sciedirect.com/science/article/pii/S0272494402000749
- Ministry of Culture of the Republic of Azerbaijan. Azerbaijani National Commission report for UNESCO. 2006. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://whc.unesco.org/uploads/nominations/1076rev.pdf
- National academy press. Community and quality of life. 2011. Available at: nationalacademies.org/10262
- OpenHeritage. Mapping of Current Heritage Re-use policies and regulations in Europe: Complex Policy Overview of Adaptive Heritage Re-Use. 2019. Report available at: openheritage.eu
- Pater, D. 10 Tips For Marketing To Gen Z Consumers. 2018. Online available at: forbes.com
- Pauchard, O. When cultural heritage becomes collateral damage in war. 2022. Article available at: swissinfo.ch/eng/culture/when-cultural-heritage-becomes-collateral-damage-in-war/47511316
- Pei, J., Liu, Y. Fluid space: Digitisation of cultural heritage and its media dissemination. 2022. Online article available at: sciencedirect.com/science/article/pii/S2772503022000202
- Peter, J. Jane Ellery. Strengthening Community Sense of Place through Placemaking. 2019. Online article available at: ideas.repec.org/a/cog/urbpla/v4y2019i2p237-248.html
- Petzet, M., Ziesemer, J. International Charters for Conservation and Restoration. Available at: openarchive.icomos.org/id/eprint/431/
- Plevoets, B.; van Cleempoel, K. Adaptive Reuse of the Built Heritage. 2019. Post-war reconstruction community Rotterdam. Plan Witteveen, the first reconstruction plan. Online article available at: wederopbouwrotterdam.nl/en/articles/plan-witteveen
- Powell, K. Architecture Reborn: The conversion and reconstruction of old buildings. 1999. p.10.
- Reece, J. Revitalization without Gentrification. 2021.
- Rose, G. Place and Identity: a sense of place. A place in the world. 1995. p. 87-110.
- Rosilvati, Y., Rafique, Z., Habib, S., Nurmandi, A. Cultural Psychology, Social Identity, and Community Engagement in World Heritage Conservation Sites. 2020. Online article available at: redalyc.org/journal/279/27964362008/html/
- Ruskin, J. The seven lamps of architecture. 1849. p. 11-21.
- Safarova, Z. Shusha is the temple of Azerbaijani music. 2013. Online article available at: musigi-dunya.az/new/added.asp?action=print&txt=12
- Schaller, S. & Guinard, S. Pop-up landscapes: A new trigger to push up land value? . 2017. p. 1-21.
- Scott, F. Alternative Scott. 2008
- Fred, S. On Altering Architecture. 2007. p. 45-49.
- Scott, R. Sanders, Benjamin, G. Communities of Place? New Evidence for the Role of Distance and Population Size in Community Attachment. 2016.
- Schuster, J. M. D. Preserving the built heritage: tools for implementation. 1997.
- Shusha today. Armenian vandalism in Shusha. Available at: shusha.today/armenianvandalism/world-importance/shusha-state-historical-architectural-reserve/
- Shushinski, F. Shusha. 1968. p. 29.
- Silbergberg, S., Lorah, K., Disbrow, R., & Muessig, A. Places in the making: How place-making builds places and communities. 2013. Online article available at: dusp.mit.edu/cdd/project/place-making
- Silk, J. The dynamics of community, place and identity. 1999. p. 6. Online article available at: journals.sagepub.com/doi/10.1068/a310005
- Supremecourt of Azerbaijan Republic. Shusha district. 2022. Online article available at: supremecourt.gov.az/en/static/view/305
- Swain, E. The magic of "multi solving". 2018. Available at: ssir.org/articles/entry/the_magic_of_multisolving#
- Tamborrino, R. Digital Urban History and Heritage: Creating Critical Narratives of the Historical City. In international conference Historical City. 2023.
- TheIrishTimes. The way we were and how to preserve it. 2005. Online article available at: irishtimes.com
- The State Committee on the Religious Associations of the Republic of Azerbaijan. Vandalized monuments of Shusha region. Available at: scwra.gov.az/az/view/objects/11
- Tingting, H., Houchao, L., Xueying, C., Jia, R. The relationship between sense of community and general well-being of Chinese older adults: A moderated mediation model. 2023. Online article available at: frontiersin.org/articles/10.3389/fpsyg.2022.1082399/full
- Tortorici, G., Fiorito, F. Building in post-war environments. 2017. Online article available at: researchgate.net
- Tuan, Yi-Fu. Space and Place: The Perspective of Experience. 1977.
- United Nations. 17 goals to transform our world. 2016. United Nations. Available at: un.org/sustainabledevelopment
- UNEP. Buildings and Climate change: Summary for decision-makers. UNEP publications. 2009.
- UNEP. The Kosovo Conflict

- Consequences for the Environment & Human Settlements, in , United Nations Environment Program and the United Nations Centre for the Human Settlements(Habitat). 2009. Online article available at: unep.org
- UNESCO World Heritage Centre. The Old City of Dubrovnik. Online article available at: whc.unesco.org/en/list/95)
- Verlag, H.C. The language of conversion, the Conversion of Language in reduce, reuse, recycle. edited by Petzet,M. and Heilayer,F.
- VirtualKarabakh. Karabakh-Azerbaijan. 2020. Available at: virtualkarabakh.az/en/post-item/2/25/qarabag-azerbaycan.html
- Zarubavel, E. Recovering Roots: Collective Memory and the Making of Israeli National Tradition. 1995.
- Zeyvalieva, T. History of Nagorno-Karabakh. 2020. Available at: imbb.az/en/news/841